

## ABSTRACT

Title of Document: AN INTERSECTIONAL GAZE AT  
LATINIDAD, NATION, GENDER AND SELF-  
PERCEIVED HEALTH STATUS

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This study's main objective is to examine selected health care factors that are associated with self-perceived health status. Five research questions guided this study: Are there differences by gender on health access, English language proficiency, literacy levels, health behaviors, perceived discrimination and depression? Are there differences in reported number of chronic conditions, sources of health information and complementary/alternative medicine (CAM) used by gender? What factors are most likely to predict self-perceived health status by gender? What complementary and alternative medicines are Central and South Americans most likely to use by gender? And what sociodemographic factors distinguish Central and South Americans from other Latinos subgroups?

The study used a cross-sectional design. Data was collected using a survey instrument that obtained sociodemographic information, and measured literacy, health behaviors, perceived discrimination and self-reported presence of chronic conditions, sources of health information and use of CAM. Multi-methods were used to analyze data: descriptive, univariate and bivariate analytic techniques; content analyses and

regrouping of responses into thematic categories; and comparative analyses of socio-demographic and access indicators of study sample to national data.

The major findings of this study are that few gender differences were found on the major study variables. However, women are less likely to drink alcohol and smoke but have higher rates of depression. Reported number of chronic conditions, sources of health information, and complementary/alternative medicine showed no difference by gender. The strongest predictor of self-perceived health status was higher education level. Sociodemographic factors that distinguish Central and South Americans from Latinos subgroups include: the study sample has significantly less income than the national sample although similar education levels; self-perceived health status of fair/poor is higher among study sample than other Latino subgroups with Central and South American women respondents having higher rates than male respondents.

This study contributes to knowledge in the field of Women's Studies and Latino Studies by expanding the lens of the study of women's health by theorizing the importance of the intersection of race/ethnicity and class as experienced by Latinas.

AN INTERSECTIONAL GAZE AT LATINIDAD, NATION, GENDER AND  
SELF-PERCEIVED HEALTH STATUS

By

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Dissertation submitted to the Faculty of the Graduate School of the  
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## Preface

“Of all forms of inequality, injustice in health care is the most shocking and inhumane.”

Martin Luther King, Jr.

## Dedication

To the two most important men in my life

Kirk Hamilton Logie Jr.

&

Kirk Hamilton Logie III

## Acknowledgements

The writing of a dissertation is a process that runs the gamut from pure terror to periods of unexplainable joy, from tears to laughter, and back again from laughter to tears. It is a process that is collaborative, and yet can be quite lonely. Either way it is a progression journeyed with the help and support of many.

I want to thank all the members of my dissertation committee for their support and for teaching me how to be a scholar (something I've come to understand is a lifelong development and to which I now aspire). I have been fortunate to work with a group of brilliant, interdisciplinary scholars. For everything, I thank Dr. Lynn Bolles, Dr. Nancy Struna, Dr. Laura Mamo, and Dr. Michelle Rowley for serving on my committee. I want to also thank Dr. Olivia Carter-Pokras and the Latino Health Initiative for the data set used in this dissertation and for their commitment to respect, support and improving the quality of life for Latinos.

The Department of Women's Studies has been a haven of intellectual growth and feminist consciousness for me. The faculty has been supportive and willing to spend their valuable time with me. I want to thank them all for their knowledge and for sharing their knowledge with me. I owe tremendous thanks to Laura Nichols and Cliffornia Howard for their assistance with a seemingly unending array of stupid questions over the years, and to Dr. Bonnie Thornton Dill whose thoughtful support and guidance was invaluable.

My fellow graduate students have believed in and encouraged me at each step in the process and have engaged me in debates and discussions that helped transform me both as a student and as a person. There were many deliberations behind closed

doors as we shared our frustrations, anger, exhilaration, laughter and challenges in navigating the graduate student experience. You all know who you are.

Outside of academia, family and friends remain the bedrock of sustenance and love and bore the brunt of my emotions. Needless to say, my husband and son are the witnesses to these emotions. I could not have accomplished my educational goals without the foundation of support my husband showed throughout. My son was always prepared with an encouraging word. “You can do it mom,” helped me through the more difficult times more than once. The greatest happiness in my life has been to give love and to be loved by these two men.

My mother gave me the strength I needed to accomplish my educational goals. She taught me that as a mother, wife and student, the educational road could be filled with bumps, but the destination was worth it. My sisters remained supportive as only sisters can be. Even after seven years of not fully understanding my research, I realize that they didn’t need to. They only needed to be able to support me and they were always there for that. My dear father, who is now deceased, gave me the wings that I needed to fly. His only wish was my happiness. He would have been very proud of me.

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who are real friends, is the best token we have of a person's success in life. I am proof of that.

Fifteen years ago, I answered a phone call from a professor at George Mason University that changed my life. I was asked to intern with Dr. Ruth Enid Zambrana around issues surrounding racial/ethnic women's health. I eagerly accepted the offer which has led me to where and who I am now. She has been my teacher, advisor, chair, and mentor; but most important of all she has been my friend. This friendship will be a life-long endeavor (at least on my part). Without a doubt many of the blessings both counted and uncounted I have in my life are directly responsible through her love, support and guidance.

She once told me that I was a gem, "a diamond in the rough." Together we have worked hard to keep chipping away at the pieces of the diamond to make it smooth. She was the gemologist who nourished my scholarship and potential. I hope I have lived up to her expectations and become the "diamond" she was looking for.

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## **Chapter One: Introduction**

Disparities in health and health care across racial, ethnic, and socioeconomic backgrounds in the United States are well documented (AHRQ, 2005; Atrash & Hunter, 2006; Clancy & Chesley, 2003; LaVeist, 2005; Satcher & Pamies, 2006; Smedley & Syme, 2000). The reasons for these disparities are, however, not well understood. W.E.B. DuBois first noted these racial and ethnic disparities more than a century ago in his analysis of 1890 census data in Philadelphia (DuBois, 1906). He claimed that health disparities reflected “a vast set of problems having a common center [that] must be studied according to some general plan” (Foner, 1970). Since then, considerable interest in better understanding the causes of these differences has called attention to the availability and quality of data on race, ethnicity, gender, and socioeconomic position (SEP).

However, larger questions still loom within the health service sector. Why do health disparities continue unabated? And what policies should be implemented or changed to close these racial/ethnic gaps in health?

Indeed, despite steady improvements in an overall health of Americans, the 2005 *National Healthcare Disparities Report* finds that disparities varying in magnitude by condition and population have been increasing among the Latino/Hispanic<sup>1</sup> community. Answers to these questions still require study “according to some general plan” that examine ongoing health problems, especially among the Latino population

A multitude of economic, social, environmental and to a lesser account some cultural factors has been implicated as potential explanations for these disparities within the Latino community. Little research to date has endeavored to sort out the role each of these factors: self-perceived health status, health access, health behaviors, discrimination, depression, and English and literacy proficiency play in contributing to healthcare disparities. Of particular note is that Hispanic Americans are often treated as a monolithic ethnic group with a single pattern of healthcare utilization (Weineck, et al., 2004). The Latino population is composed of many different groups with diverse health needs and different barriers to accessing care. As our knowledge of the Latino experience in the United States grows, so does our interpretation of it, and no less so when we are discussing the health status of predominately Central and

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<sup>1</sup> For the purpose of this dissertation, and consistent with the federal standards for racial and ethnic data, I use the terms Hispanic and Latino interchangeably. Survey after survey of Latinos have found that their preferred form of identification is through their specific national origin, that is, as Mexicans, Mexican Americans, Puerto Ricans, Hondurans, and the like (De la Garza, DeSipio, Garcia, Garcia, & Falcón, 1992). The basis of their identification as “others” in U.S. society is through a nationalism and/or ethnicity grounded in their country of origin, whether born there or not. This creates the constant potential for transnational identities fed by very active international circular migrations, supporting such broad and to many obscure notions as “cultural citizenship” (Flores & Benmayor, 1997) and other post-colonialist perspectives (Soja, 1996). In terms of the health care and research arena, categories and identifiers used to document and describe Latinos can greatly affect the kind and number of services and resources allocated by the public and other sectors for addressing Latinos’ health needs (Aguirre-Molina, Molina, & Zambrana, 2001).



South Americans in the United States since most national data systems have focused predominantly on Mexican origin groups.

The lack of research and misconceptions of Latinos as a homogeneous population lacking within-group diversity could function as a barrier to efforts aimed at providing appropriate care and result in the continued health disparities and inequalities the Latino community faces. Therefore, an intersectional gaze at Latinidad, nation, gender and self-perceived health status may serve as the impetus of a “general plan” to better understand the effects of economic, social, and health access factors on health disparities.

#### *An Intersectional Gaze*

The last three decades have witnessed increasing attention to women’s health research, both in the United States and internationally.<sup>2</sup> Feminist scholars in disciplines such as sociology, public health, and medicine have significantly contributed to the nascent sub-field of women’s health. This emerging body of feminist research has resulted in a growing and rich understanding of factors affecting the health of women (Ruzek, Clarke, & Olesen, 1997; Breen, 2001; Fee & Krieger, 1994; Lewis & Bernstein, 1996). Yet only a limited number of scholars in women’s health have focused on health disparities affecting Latinas (Aguirre-Molina, Abesamis, and Castro, 2003; Zambrana & Ellis, 1995; Amaro, 1993).

Stimulated by health activism in the late 70’s and 80’s and the growing feminist movement, women’s health focused basically on gender bias and/or

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<sup>2</sup> See Weber, 2006: *Reconstructing the Landscape of Health Disparities Research: Promoting Dialogue and Collaboration between Feminist Intersectional and Biomedical Paradigms*.

reproductive health. The question of racial/ethnic women's health issues as grounded in race, ethnicity, and class were raised but largely ignored.

At its forefront, an intersectional gaze draws from multiple sources of knowledge, has multiple starting points for analyses, and redefines the parameters of knowledge and its foundations. An intersectional perspective inserts categories of gender, race, ethnicity, class and other critical dimensions of difference to understand the raced and classed lived experiences of women in different social locations, to learn both what factors account—and how they account—for women's difference. An intersectional gaze integrates multiple interdisciplinary sources to examine the simultaneity of identities (gender, nation, immigration status and SEP) among Central and South American women and how these social categories interact with institutional health care hierarchies and the effect on their bodies as evidenced by self-reported perceived health status.

The intersectional gaze permits the analysis of concepts that have not been fully explored, specifically the interrelationship between Latinidad, nation, and gender and how these categories influence the health status of Latino immigrant women and men. The prevailing biomedical model inserts the categories of Latinidad, nation and gender as mutually exclusive concepts, which excludes the possibilities of conducting an intersectional analysis. The complexity of Latinidad, nation, SEP and gender recognizes the limitations of existing social categories and questions the ways in which they draw boundaries of distinction. Theorizing these mutually constituted markers of Latinidad, nation, SEP and gender recognizes the Centrality of the fluid boundaries of these social categories and the social construction of a raced and

nationed identity in understanding inequities in health access and quality of health care services. Intersectional theorizing seeks to reconcile these contrasting views by focusing on individuals or groups who cross the boundaries of constructed categories (McCall, 2007), in an effort to understand the ways in which the complexity of the intersectional gaze unfolds. Though each concept is explained separately in the sections below, the dimensions of Latinidad, nation, and gender, as they intersect with SEP represent emerging health constructs that inform existing conceptualizations of factors associated with self-perceived health status.

### *Latinidad*

Along with an intersectional gaze, a concept that has not been fully explored is the term Latinidad, which invokes a pan-Latino solidarity or Latino-(ness). The identity of Latinidad can be both intriguing and problematic, especially in health research where Latinos are treated as a monolithic group. Latinos present special problems for the creation and application of broad cultural categories that are used to mark and organize human difference (Del Rio, 2006). Placing Latinos at the doorstep of dominant US culture is not new, nor is it a simple endeavor. Ideological and historical complexities circulate through discussions of race, ethnicity, gender, and nation.

Latinos are bound together by discourses of geographical ancestry rather than coherent potency of race or nationalism. Even the Latin American roots of Latino solidarity or Latinidad in the United States contain contradictions. Néstor García Canclini argues that “Latin American countries are currently the result of the sedimentation, juxtaposition, and interweaving of indigenous traditions...of Catholic

colonial Hispanism, and of modern political, educational, and communicational actions” (Canclini, 1995). Race, language, and nation sit among many incongruities within the US “Latino” or “Hispanic” designation (Del Rio, 2006; Flores & Benmayor, 1997). Even the term “US Latinos” creates problems because of Puerto Rico’s colonial relationship with the United States and the presence of Chicanos in the Southwest that predates the founding of the US nation (Valdivia, 1999).

Another tenet of *Latinidad*, Latinos use that illuminates identity, place and belonging is the coming together of different ethnicity’s in order to fight for social justice as one group, as Latinos. *Latinidad* is a quintessentially diverse, transnational, and changing phenomenon in the United States and the rest of the world. To date, health care research has not engaged dialogue on what might constitute *Latinidad* in different historical and geographical contexts; on the social, cultural, and political importance of Latino/a communities in the U.S. and elsewhere; and on the relationships among different diasporic Latino/a communities, and their relationships with Latin America. An intersectional gaze explores the various relationships Latinos/as build with other communities throughout the United States and the ways in which together they create meaningful new communities, cultural knowledge and expressions that may or may not influence self-perceived health status.

### *Nation*

No one ‘becomes’ a woman (in Simone de Beauvoir’s sense) purely because she is female. Ideologies of womanhood have as much to do with race and class as they have to do with sex...it is the intersections of the various systematic networks of class, race, (hetero) sexuality and nation...that position us as women (Mohanty, 1991, pp. 12-13).

The differences between women are clearly signaled in both national and international health statistics (Doyal, 1995). While outside the scope of this

dissertation, international statistics from participant's country of birth may indeed describe variations of measured self-perceived health status. However, this study should be seen as a contribution to the process of identifying commonalities and differences in Latina identities while at the same time remaining sensitive to the complex social, economic and cultural variety of their lives in the United States.

While 20% of Central Americans and 25.8% of South Americans since 2000 are foreign-born, the high Latino birthrate means that the second generation is growing faster than the first; that is, more Latinos are being born in the United States than are immigrating to this country (Pew Hispanic Center, 2008). The following information is taken from a summary of a recent event entitled: *Key findings from the 2006 Latino National Survey (LNS)* which addressed how Latinos identify themselves: "as Americans? As Latinos? As members of particular national groups? Approximately 2/3 of the survey's respondents identified themselves with the United States" (Garcia, 2006). "The respondents reported multiple identities, with Latino being only one of them. When forced to choose only one identity, the number of first generation of immigrants who answered "American" was low but it increased greatly for Latinos born in this country. High percentages thought of themselves in a pan-ethnic context, and the doubling of such identification since 1989 holds implications for the possibility of Latinos as a political force" (LNS, 2006). "Interestingly, a higher sense of pan-ethnicity was found among women, among Latinos/Latinas who identified themselves as Democrats and moderates rather than as liberals, and among those with more years of education, more involvement in community activities, and more regular media use" (Garcia, 2006).

Jones-Correa (2006) speaking about “the decline of transnationalism” noted that immigrants to the United States generally loosen connections with their home countries over time. The LNS demonstrated that Latinos are following this precedent. Contact with family and friends, remittances to home countries and plans to return to the country of origin decline markedly the longer Latinos stay in the United States as well as across generations. Seventy-five percent of Latino immigrants’ reports Spanish as the primary language of media use during their first year in the United States. From that point on, the use of English increases dramatically, with a large majority emphasizing the importance of speaking English (as well as looking white and being Christian) as part of being American. What Jones-Correa (2006) speculates is that this is a result of Latinos eventually becoming socialized in the United States. Without giving up their heritage, what Latinos want, simply, is to be American.

The Pew Hispanic Center's 2006 National Survey of Latinos collected data on a variety of transnational activities and a wide range of attitudes and beliefs. According to the Pew Hispanic Center (2007), Latino immigrants who have been in the U.S. for decades and those who arrived as children are less connected than those who arrived more recently or migrated as adults. There are also significant differences by country of origin, with Colombians and Dominicans maintaining more active connections than Mexicans and with Cubans having the least contact. Whether Latino immigrants maintain active, moderate or limited connections is an important marker of their attitudes toward the U.S., their nation and their own lives as migrants. Those with the highest levels of engagement have deeper attachments to their country of origin than immigrants whose connections are less robust. They also have more

favorable views of their native country in comparisons with the U.S. Nonetheless, a clear majority of even these immigrants see their future in the U.S. rather than in the countries from which they come.

### *Gender*

As a social construction, gender is a social institution that patterns interactions in everyday life and in major social organizations (Lorber, 1994). Gender impacts self-perceived health status through economic circumstances, work and family responsibilities, lifestyle choices, social interaction with family members and friends as well as with interactions with health care professionals. Gender identity is a person's own social sense of identification as male and female. The survey specifically measured male or female as self-reported gender identity with an implicit heterosexual bias.

Central to the tenets of this dissertation is gender as an important determinant of health care service. Gender, as a determinant of health, refers to inter-related dimensions of biological difference, psychological difference and social experience (Keleher, 2004). A critical discussion in this dissertation is a selective understanding of gendered health as a concept that represents analysis of men's and women's health, and of the differences between women's and men's health in the patterns of health access, health behaviors, discrimination, depression, and English and literacy proficiency. A more comprehensive understanding of gendered health incorporates analysis of these factors and the embodiment of inequities in health whereby differences are largely socially determined.

For feminists who study women's health, attention to gender has meant concern with the status of women and men in the social order. Gender also plays a critical role within our interactions with health care professionals. There is still evidence that women are treated by some doctors as less valuable than men are. This can lead to demeaning attitudes as well as the unequal allocation of clinical resources (Doyal, 1995; Fee & Krieger, 1994). This gender bias is especially evident in the context of medical research, where studies have shown that women have too often been excluded from studies for inappropriate reasons (Mastroianni, Faden, & Federman, 1994).

Gender in the health care professions is an important factor in understanding quality of care among Hispanic women (Zambrana, 1996). As noted in the Sullivan Report quality of care is highly associated with the under representation of Hispanics in the health professions, particularly physicians. In 2000, approximately 6% of medical school applicants were of Hispanic ethnicity. This percentage has been projected to increase to 9% by 2020, but this growth rate is insufficient to keep pace with the rapid growth of the Latino-Hispanic population and remains gendered in specializations within the health care professional community (Cora-Bramble, 2007). Frequently the discussion of gender in both the public and health care domains is dominated by stereotypes and assumptions about Latino women that are associated with discriminatory behaviors and power relationships. These powerful assumptions and behaviors of health care providers shape the social, cultural and economic health care environment that diminish women's opportunities and negatively effects their lived experiences and quality of care (Keleher, 2004; Doyal, 1995; Krieger, 2000).



Explanations for differences in men and women's health highlight socioeconomic inequality as a fundamental cause for variations in their well-being, particularly when self-perceived health status is the outcome in question (Ross & Bird, 1994). In general, persons of lower socioeconomic position report fair or poorer health, in part because they are exposed to more hardship and stress and have limited access to resources that can be used to prevent and cure disease (Phelan, Link, Diez-Roux, Kawachi, & Levin, 2004). Women are more likely than men to work part-time, participate in un-waged labor, and receive unequal wages, all of which contributes to their lower socioeconomic position and drives down their health. Once these inequalities are considered, the effect of gender on self-perceived health status is often substantially altered, and in some instances even reduced to non-significance in the health research literature. In a world defined by and for men, women are 'the other' (de Beauvoir, 1972). It can therefore be assumed that any discussion regarding gender and health must also take into consideration the differentiation of factors such as age, race, ethnicity, sexual preference, disability, and of critical importance, the wealth or poverty of their geopolitical status—that is nation.

### *Latino Population*

In future years, the growth of the Latino population is projected to increase dramatically. Latinos currently number 41.3 million people or 14.1 percent of the total U.S. population, and are the largest racial/ethnic group in the country (U.S. Bureau of the Census, 2005). By the year 2050, the U.S. census projects that the Latino population will grow 188 percent to 102.6 million, nearly one-quarter of the U.S. population (U.S. Bureau of the Census, 2005).

It is estimated that there are more than 3 million Central and South Americans living in the United States (U.S. Census Bureau, 2000 Summary File 1, Matrix PCT11). Within the United States, the geographic areas of the Northeast, the South and the West show higher concentrations of Central and South Americans (Ramirez and de la Cruz, 2003). Of the 10.3 million undocumented immigrants living in the United States, 8.4 million are estimated to be Latino with 5.9 million coming from Mexico and other Latin American countries accounting for 2.5 million (Passel, 2005).

**Table 1.1*****Detailed Hispanic Origin (2005)***

	Number	Percent of Hispanic
Mexican	26,784,268	63.9
Puerto Rican	3,794,776	9.1
Cuban	1,462,593	3.5
Dominican	1,135,756	2.7
Costa Rican	111,978	0.3
Guatemalan	780,191	1.9
Honduran	466,843	1.1
Nicaraguan	275,126	0.7
Panamanian	141,286	0.3
Salvadoran	1,240,031	3.0
Other Central American	99,422	0.2
Argentinean	189,303	0.5
Bolivian	68,649	0.2
Chilean	105,141	0.3
Colombian	723,596	1.7
Ecuadorian	432,068	1.0
Peruvian	415,352	1.0
Uruguayan	51,646	0.1
Venezuelan	162,762	0.4
Other South American	89,443	0.2
Spaniard	362,424	0.9
All Other	3,033,648	7.2
Total	41,926,302	100

Source: Pew Hispanic Center tabulations of 2005 American Community Survey

### *Study's Objective*

The primary objective of this dissertation is to examine selected health care factors that are associated with self-perceived health status among Central and South Americans in Montgomery County, Maryland by gender.

Researchers have amassed an exceptional body of evidence on racial and ethnic disparities in health care: where they exist, who is affected, and what their consequences are (LaVeist, 2005; Satcher & Pamies, 2006; National Research Council, 2004; Schulz & Mullings, 2006). With a few exceptions, the existing evidence base on disparities is a patchwork quilt of studies that are long on descriptions and short on solutions (Clancy & Chesley, 2003). Given the heterogeneity, coupled with increased immigration and limited research among Central and South Americans and Latino women, understanding the selected health care factors that are associated with self-perceived health status provide the compelling and challenging imperative for this descriptive cross-sectional study. However, the challenge is heightened by several factors. Specifically, Latinas are underrepresented in the research literature, which is a reflection of the paucity of studies that focus on these women. What does exist in general does not address the primary issues affecting their health and health status (Aguirre-Molina, Abesamis, & Castro: 2003).

Secondly, while disparities in health care potentially affect all Americans and individuals from any group, they are not uniformly distributed across populations.

Health disparities<sup>3</sup> in populations where race, ethnicity, and gender intersect have been persistent and understudied. Researchers have repeatedly documented that the intersection of factors such as socioeconomic differences, differential access to health care, quality of health care and services, and direct and indirect consequences of discrimination are all key determinants of Latinos health disparities (Zambrana, Thornton-Dill, 2006; Aguirre-Molina, Molina, and Zambrana, 2001; American College of Physicians, 2000; Smedley, Stith, and Nelson, 2003; Lillie-Blanton, and Hoffman, 2005; Mechanic, 2002).

Disparities in Latino women's health are invariably connected to and affected by SEP, race, ethnicity, and access to quality community-based institutional resources that are gender and family supportive (Zambrana, Thornton-Dill, 2006).

This study's main objective is to increase our understanding of the selected health care factors that are associated with self-perceived health status.

Research questions for this dissertation study include the following:

1. Are there differences by gender on health access, English language proficiency, literacy levels, health behaviors, perceived discrimination and depression?
2. Are there major differences in reported number of chronic conditions, sources of health information and complementary/alternative medicine used by gender?

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<sup>3</sup> The term "health disparity" is almost exclusively used in the U.S., while the terms "health inequity" or "health inequality" is more commonly used outside of the U.S. Most dictionary definitions define disparity as inequality; difference in age, rank, condition, or excellence; or dissimilitude. Inequality is similarly defined: "condition of being unequal" or "lack of equality as of opportunity, treatment or status. Inequity, though, signifies an ethical judgment in definitions of disparity, e.g.: "a lack of equality and similarity, esp. in a way that is not fair." (Carter-Pokras & Baquet, 2002).

3. What factors are most likely to predict self-perceived health status by gender?
4. What complementary and alternative medicines are Central and South Americans most likely to use by gender?
5. What sociodemographic factors distinguish Central and South Americans from other Latinos subgroups?

Given the recent immigration debates, economic and political realities, discriminatory practices within the health care system, and paucity of data among this population group, this study represents a new generation of research. Since elimination of health disparities has become a major priority for national health agencies, health advocates and researchers, this descriptive study may provide the foundation for future research on an underserved and understudied population of Central and South American men and women.

The following chapters present a literature review on empirical works relevant to this study, a detailed methods section, presentation of results and discussion and a final chapter on summary and implications. Chapter two discusses multiple theoretical perspectives that have been used to examine health status among the general population. Multiple disciplinary and interdisciplinary traditions are drawn upon to explore the intersections between the disciplines of social science research, mainstream health disparities studies and feminist health research perspectives. Interrogating biomedical approaches is important, as these models are too narrow for understanding health disparities. An intersectional framework that promotes expanded conceptions of health that incorporates a broad framework of social

relations and institutions and situates health in communities and families is used. By challenging traditional approaches and centering perspectives of oppressed groups such as Central and South American men and women, an intersectional theoretical framework provides situated knowledge that raises new questions and presents new opportunities for understanding health disparities.

Chapter three of this dissertation study presents the methodological approaches. Description of the setting, the sample of the study, and questionnaire development are addressed. Conceptual and operational definitions of all the measures are included. Chapter three also describes the data analysis procedures utilized to address the research questions of this study. Limitations of the study are also provided.

Chapter four presents the survey data results, which answer the five questions posed by this study. Survey results are presented for the selected variables by gender. In this chapter, the results are discussed with respect to the literature in each area to assess whether the findings confirm existing knowledge or contradict what we know. Qualitative data for other response categories are described and a discussion of how the study sample compares with nationally representative total Latino, Central and South American and Mexican American samples on selected sociodemographic and access indicators is provided. Chapter five provides a summary of the major findings of the study by gender, discusses the research implications for this group as well as the policy and practice implications, and the contributions of this study to the field of Women's Studies.

## Chapter Two: Theoretical Framework and Literature

### Review

In this dissertation, I take a critical theoretical and empirical stand to highlight health disparities as the product of a multitude of factors, among them: psychosocial, cultural, socioeconomic, quality of care factors and policy factors (Atrash & Hunter, 2006). As documented by The Institute of Medicine (IOM) report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (Smedley, Stith, & Nelson, 2002), health care research has begun to focus on complex, historical, multifaceted racial and ethnic disparities. The report reviews multiple studies in the literature and concludes that racial and ethnic minorities receive inferior quality of care compared with whites, even after controlling for insurance status and socioeconomic status.

Efforts to reduce or eliminate persistent health disparities offer the most important opportunities to improve the health of residents of the United States, and are rightfully a high priority for public health and social science scholars (Mullings & Schulz, 2006). Research in the elimination of inequalities in health status ultimately may require changes not only in psychosocial factors, such as social support and health care delivery, but also in the understanding of inequities in resources and how race/ethnicity, class, gender and health inequalities are produced within particular social contexts, especially among the most underserved, understudied, and vulnerable populations such as Central and South Americans.

To address health disparities among Central and South American women more effectively, we need to open up the landscape of health disparity research so



that fruitful dialogue and collaborations can take place among intersectional scholarship. Ruzek, Olesen, and Clarke (1997) propose, for example, that sociologists have long argued that the whole is always more than the sum of its parts; to comprehend the whole of women's health/illness or all women's health/illness, it is essential to recognize how partial each of the parts is likely to be. Ruzek (1999) proposes conceptualizing women's health as embedded in communities, not just in separate bodies. All of us are more than an aggregation of body parts, cells, social actions, or social statuses. Thus, synthesizing the findings of different disciplines including medical sociology, psychology, anthropology, history, feminist theory, and intersectional scholarship may contribute to a more integrated feminist intersectional framework that looks at gender/racial/ethnic disparities. This dissertation study shows a more interdisciplinary approach allows us to engage the difficult questions and concerns about Central and South American women and the connections between the individual choices available—a discussion which Ruzek (1999) and others have argued is necessary if we hope to make any serious progress against persistent health disparities.

For example, she contends that to make headway on health disparities, we will need to temper entitlements, reduce personal choices, and shift national expenditures away from highly profitable investments in medical technologies and toward primary, preventive care (Ruzek, 1999; Weber & Parra-Medina, 2003). Further Ruzek (pg. 304) cautions, "Feminist commitments to widening access and increasing quality are not achievable until recognition of the urgency of cost containment, some degree of

rationing, and some restriction of individual choice is integrated into feminists agendas for health reform.”

In his book *Foundations of Social Theory* (1990), James Coleman points out that to formulate meaningful theories or explanations of social phenomena, both the macro (collective) and the micro (individual) levels of observation and analysis and their interrelationships must be examined. Lu Ann Aday (1993) expands this theoretical approach to studying the health and health care of vulnerable populations and examines the ethical, conceptual, and political contributions of the community (macro) and individual (micro) perspectives and their interrelationships in illuminating the concept of examining health status in underserved communities. In the past thirty years, feminist scholarship on the intersections of race/ethnicity class, gender and other dimensions of difference has advanced knowledge and reshaped views of the nature and consequences of social inequality, health disparities and the inequity of resources to determine health status (Zambrana, 1987; Acker, 2000; Breen, 2001; Collins, 2000; Weber, 2006). Feminist scholar Lynn Weber expands intersectional scholarship as a location of knowledge production. Weber delineated a conceptual framework that takes as its primary focus “ways in which these systems are simultaneously socially constructed in historically specific power relationships both in (macro) social structures and in (micro) individual lives,” (Weber, 2001). Despite these significant advances in the social sciences--feminist intersectional research remains largely marginalized in the academy and public policy arena—as are other critical public health approaches to health disparities that differ in significant ways from the biomedical paradigm; ecological (Bent, 2003), technoscience (Clarke

& Olesen, 1999; Shim, 2002; Mamo, 2003), social capital (Wallack, 2000), community-based participatory research (Minkler & Wallerstein, 2003), geography (Moss & Dyck, 2002), and social justice (Rees & Chavkin, 2006; Weber, 2006).

No single or singular view of women's health will adequately reflect the complexities of women's lives, although dominant biomedical models are often taken to represent "all" of women's health (Ruzek, Clarke, & Olesen, 1997). Biomedical research has systematically ignored the complex relationships of race, ethnicity, class, and gender, failing to distinguish whether these characteristics are thought of as biological or social attributes and failing to study the intersection of these characteristics and their relationship to health (Thomas, 1995; Zimmerman & Hill, 2000). Within biomedicine, feminist perspectives have spurred recognition of how gender affects the etiology, natural history, and treatment of diseases. However, although these models may recognize social and behavioral dimensions of health, they do so largely within the framework of clinical research and practice.

Therefore, it is the marriage between the disciplines of social science research, mainstream health disparities scholars and the women's health research community that is needed to bridge the gap between the biomedical framework and an intersectional framework that promotes expanded conceptions of health that incorporates a broad framework of social relations and institutions, and situates health in communities and families. By challenging traditional approaches and centering perspectives of oppressed groups such as Central and South American men and women, intersectional research provides situated knowledge that raises new questions and presents new opportunities for understanding health disparities. This approach

provides a more nuanced and complex understanding of Latina health and challenges researchers to pay more attention to the social production and maintenance of inequality as it is manifested in the intersection of adverse social conditions such as poverty and poor housing, access to health care, and the quality of health care received (Zambrana & Dill, 2006).

### *Emerging Latino Populations*

The questions and concerns of the dissertation project emerge at a moment when growing racial/ethnic diversity and demographic changes that are occurring in the United States may have significant implications for health care and health policy (Clancy & Chesley, 2003). The availability of high-quality data on race, ethnicity, and other characteristics of individuals receiving health care are critical to documenting disparities in health and health care. However, there are many weaknesses in the data sources currently available (National Research Council, 2004; Zambrana & Carter-Pokras, 2001). Notwithstanding the growth of peoples from Central and South America, the U.S. census has remained constant in the collection of data focusing primarily on the three major Latino subgroups—Mexicans, Puerto Ricans, and Cubans (Falcón, Aguirre-Molina, and Molina, 2001).

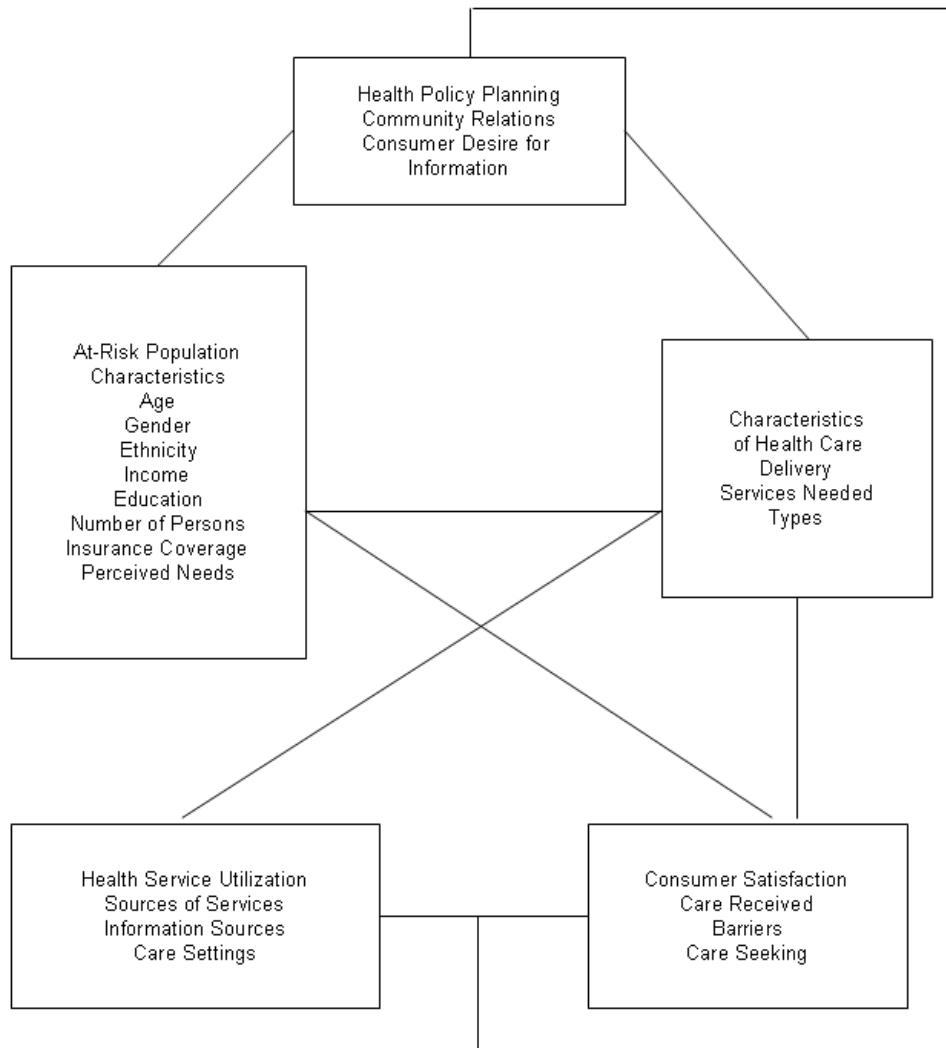
According to the 2006 U.S. Census Bureau population estimates, there are roughly 44.3 million Hispanics living in the United States. This group represents almost 15 percent of the U.S. total population. In 2004, among Hispanic subgroups, Mexicans rank as the largest at 64 percent. Following Mexicans are Central and South Americans (13 percent), Puerto Ricans (9.4 percent), Cubans (3.9 percent) and the remaining 7.5 percent are people of other Hispanic origins. (For a more detailed

summary see chapter one: table 1.1). Another significant point is that in 2004, 34.3 percent of Hispanics were under the age 18 in comparisons to 22.3 percent of non-Hispanic Caucasians. Among Hispanics, Mexicans have the largest proportion of people under age 18, at 36 percent (Office of Minority Health, available at [www.omhrc.gov](http://www.omhrc.gov)). To increase our understanding of Central and South American health status, this study draws upon several models in the field of public health to expand our framework for the study of this group. The following sections describe behavioral models and then integrate their major concepts into a feminist intersectional framework to guide the interpretation of the findings,

#### *Behavioral Theoretical Models*

Behavioral theoretical models offer insights into factors that influence self-perceived health status and may pave the way for increasing knowledge about specific factors that influence Central and South Americans whose health may be substantially complicated by inequity of resources and access to health care delivery. There are two principal models used in understanding health disparities. Andersen (1995) proposed a seminal model that focused primarily on access factors. Aday's (1993) model addresses the importance of intersectionality, community resources, social capital and human capital dynamics. One of the major factors in the immigration adaptation process is access to health care. Aday's model assumes access to health care. To strengthen the conceptual model, Andersen's model on access is included.

FIGURE 1  
Andersen's Theoretical Behavioral Model



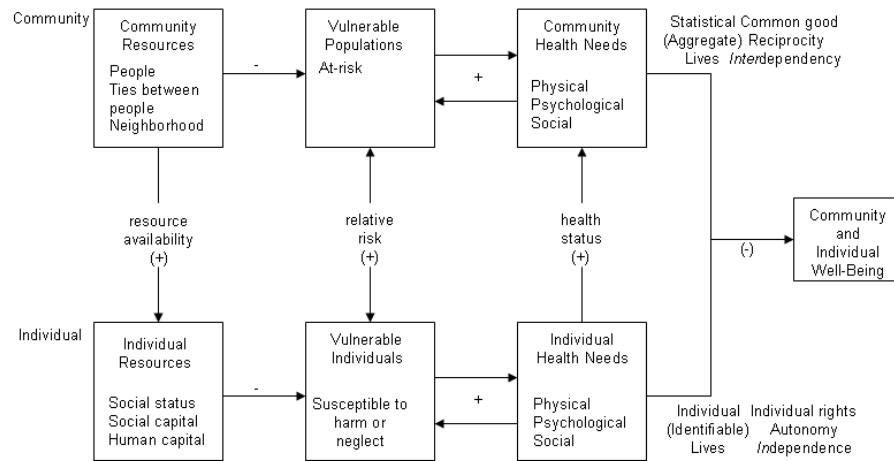
**Source: R. Andersen (1995). Revisiting the Behavioral Model and Access to Care. Does it Matter? Journal of Health & Social Behavior**

Use of Andersen's model (figure 1) is frequently used by researchers to determine characteristics involved in health care decisions, behaviors, and access to care. This model uses five domains that underscore interrelationships among health

policy, health care delivery models, and behavioral characteristics of “risk” populations, health service utilization, and consumer satisfaction (Andersen, 1995). A limitation of Andersen’s broad model is that it does not differentiate, include or distinguish among cultural differences, psychosocial factors, and social support or community resources. Psychosocial factors, in particular, depression and perceived discrimination are not well defined in the Andersen model, leaving a void of important variables that may influence self-perceived health status. However, the model has relevance, and was used with a targeted group of the Hispanic population-- Hispanics in the Southwest whose life expectancies were found to be negatively influenced by the lack of health care access. Andersen, Lewis, Giachello, Aday, and Chiu (1981), reported significant health care access inequalities which were attributed to the higher mortality rates and lack of timely health care interventions. In this model, health knowledge, beliefs, attitudes, literacy or awareness of health conditions have less prominence. Thus, this model is not sufficiently inclusive of factors that have been found to be important in the health disparities research.

## Aday (1993) Theoretical Behavioral Model

FIGURE 2  
Aday's Theoretical Behavioral Model



Source: Aday, L. (1993). *At Risk in America: The Health Care Needs of Vulnerable Populations in the US*.

Aday's model (figure 2) is especially useful in this dissertation's study of Central and South American men and women, a population that has been historically underserved and underrepresented in the health care literature. The Latino health paradox argues that Latinos have a more favorable health profile than would be expected given their socioeconomic disadvantage. The healthy effect is attributed to sociocultural characteristics of Latinos that operate as protective factors, and/or selective immigration patterns.<sup>4</sup>

The role of culture as an antecedent to health status and the operationalization of culture as a level of acculturation have been challenged by AHRQ's 2005 *National Healthcare Disparities Report* and the 2004 Panel on *DHHS Collection of Race and*

<sup>4</sup> For more information on the Latino health paradox see: D. Hayes-Bautista (1992) Latino Health Indicators and the Underclass Model: From Paradox to New Policy Models. In A. Furino (Ed.), *Health Policy and the Hispanic* (pp. 32-47). Boulder, CO: Westview Press.



*Ethnicity Data* organized by the National Research Council. Part of these challenges stem from scholars who have argued that acculturation research is plagued by essential and unavoidable conceptual and methodological difficulties that are inherent in the construct of acculturation itself (Hunt, Schneider, and Comer 2004).

Some researchers have determined a set of explanations for this paradoxical phenomenon in proposing that socio-cultural factors, namely health behaviors and social networks, exert a protective effect on immigrant health (Abraido-Lanza, et al., 1999; Scribner, 1996). However, the prominence granted to acculturation within these explanations diverts attention from structural and contextual factors, such as social and economic inequalities, that could affect the health of immigrants and their descendants as proposed by Viruell-Fuentes (2007). Acculturation-based explanations for immigrant health outcomes are problematic, in part, because they place the onus of culture on the individual.

As Hunt, et al., (2004) contend, attention to addressing the structural contexts that reproduce social and economic inequities and other complexities is important, lest “ethnic culture is made culpable for health inequalities” (p. 82). This research applies to Aday’s conceptual model as it proposes theoretical alternatives that draw attention to the complex processes that Latino immigrants experience. Aday’s *At Risk in America*, (1993) focuses on five such factors:

1. Their health needs are serious.
2. Medical and nonmedical services are needed.
3. The growth in their number is placing greater demands on related service delivery sectors.

4. Their complex and multifaceted needs are however, not adequately met through existing financing or service delivery arrangements.
5. Health policy makers are increasingly concerned about how to deal with the demands they place on existing systems of care (1993, p.10).

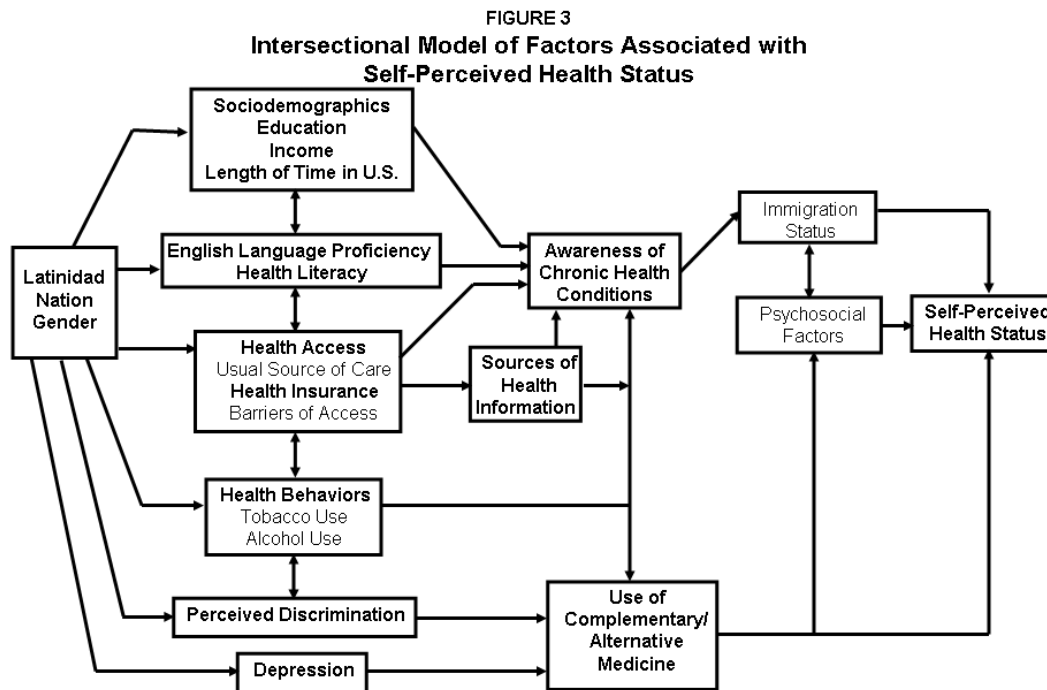
The model is based on the interactions between individual assets, social assets, and demographic factors contributing to a higher likelihood of poor health outcomes in the United States. Demographic factors include the dimensions of difference that utilizes an intersectional approach associated with the influences of self-perceived health status. These factors not only include age, gender, race, and class—but, national origin and immigration status as important variables. Aday also delineated two other important components in her conceptual model. First, individual assets (human capital) which include those skills and resources that contribute to one's ability to be economically self-sufficient, such as education and employment. Secondly, social assets (social capital) refers to the characteristics of one's social network that provides emotional and social support, such as friendship and kinship ties, neighborhood ties, religious organizations and resources within the community.

Aday's "differential vulnerability hypothesis" refers to the higher risk of health outcomes and poorer health status that result from the convergence of these three sets of resources (Aday, 1993; Sebastian, 1999). The important underlying concept in Aday's formulation is that vulnerability to poorer health status does not represent a personal deficiency on the part of members of the population under study. It reflects the interaction effects of many factors over which individuals have little control and therefore indicates that society as a whole has a responsibility to provide

unique and appropriate health care services for Central and South American populations. Attention to these intersections may help us better elucidate how various aspects of immigrant-adaptation processes shape self-perceived health status.

In summary, Andersen's model defines essential aspects of access factors, but does not explore psychosocial factors, social support or community resources that may influence health status. In contrast to Andersen's more general theoretical model, Aday's conceptual model directly relates to the provisions of conceptual, empirical, and normative points of reference for understanding the origins and consequences of poor or fair self-perceived health status among Central and South American communities a preferred model to examine health status. However, neither of these models addresses issues of power relations or gender except for broad areas such as reproductive health. Thus bringing together key concepts for both of these models, I seek to integrate the intersections of race, ethnicity, gender, nation, and low SEP using an intersectional framework to explore the social and economic roots of inequality.

## *An Intersectional Gaze: Conceptual Framework*



Source: Laura A. Logie  
Adapted from: Zambrana & Carter-Pokras, 2004; *Latino Health & Behaviors*. In Anderson, NB (Ed) *Encyclopedia of Health & Behaviors*.  
Adapted from DR Williams (1993), and Primomo, J. (1995). *Chronic Illness & Women*. In C. Fogel & N. Woods (Eds.) *Women's Health Care* (pp. 651-679). Sage

Considerable progress has been made over the past decade in understanding disparities but the role of gender; national origin and immigrant status remain elusive as critical dimensions. The assumptions underlying Aday's framework to the study of underserved populations is the impetus for the expansion of these models using an intersectional conceptual framework, (figure 3). The model seeks to show the intersecting and inter-relatedness of variables on self-perceived health status. The variables (in BOLD) within the framework are analyzed specifically in this study though the other factors in the model play a critical role in self-perceived health status as shown in the Latino health research (Martinez & Carter-Pokras, 2006; Zambrana & Carter-Pokras, 2004; Carter-Pokras & Zambrana, 2001; Hayes-Bautista, 1992; Zambrana, 1987).

The importance of moving beyond individual categories of identity and including social context expands the models for understanding disparity. Thus, how the mutually constituted dimensions of identity (intersection of race/ethnicity, class, national origin and gender) are linked to institutional health care resources and policy preferences (such as immigration policy) help to better explain the factors associated with the material consequences (health status) for Central/South American women. Inherent in this socially constructed framework for studying Central and South Americans by gender are two Central tenets that include: Central/South American women constitute a socially-defined category that has historical roots in Latinidad and their social position in the matrix of existing power hierarchies create a unique set of lived experiences and reflect the multiplicative nature of intersecting oppressions (such as racism, limited access to health care resources, poor quality care and fear of deportation due to INS raids in their community) (Collins, 2000; Baca-Zinn and Dill, 1994). Each concept in this constructed framework draws from multiple disciplines and theoretical models<sup>5</sup> and seeks to expand our understanding of the lived health experiences of emerging Latino populations within US society. This framework contributes to a new theoretical way of looking at institutional health structures, but it also contributes to a health praxis that can be utilized by health care researchers and providers as a concrete visual model of locations to insert appropriate health care interventions such as mental health counseling for depression. As a result, targeted

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<sup>5</sup> Zambrana & Carter-Pokras, 2004: Latino Health & Behaviors. In Anderson, NB (Ed) Encyclopedia of Health & Behaviors. Sage. Adapted from DR Williams (1993), and Primomo, J. (1995). Chronic illness and women. In C. Fogel & N. Woods (eds.), *Women's Health Care* (pp. 651-679). Thousand Oaks, CA: Sage Publications.

initiatives of health prevention and education may uncover new opportunities in developing appropriate and responsive services for the Latino community.

The following sub-sections provide an overview of the sociodemographic profile of Central and South Americans and a synthesis of the empirical research in corresponding order of the framework on the variables under study.

### *Central and South American Populations*

Central and South Americans represent a diverse and heterogeneous cohort of peoples from multiple national origins, different races, and socioeconomic positions (DeJong, 1994; Horowitz and Miller, 1998). The South American born makes up a small proportion of both the overall foreign-born population and the Latin American-born population in the United States. However, the number of immigrants born in South America has grown rapidly over the past 30 years (Dixon & Gelatt, 2006). The South American born (1.9 million) were the smallest foreign-born group from Latin America behind those from Central America (2.0 million), the Caribbean (3.0 million), and Mexico (9.1 million).

About 52.3 percent of the South American born were women compared with 50.2 percent of the foreign-born population in general. Only two countries, Uruguay and Ecuador, had more male immigrants than female, though the difference was slight (52.0 and 50.5 percent male, respectively). The gender ratio of immigrants from all South American countries was nearly balanced. The countries with the least balanced gender ratios were Colombia (54.9 percent female), Suriname (54.3 percent female), and Brazil (53.8 percent female) (Grieco, 2003). In Central America of the two million foreign-born, 817,336 were from El Salvador and 480,665 were from

Guatemala, according to Census 2000. Over 70 percent of the Central American foreign-born lived in five states according to Census 2000. California was home to 725,339 (36 percent), Florida to 241,703 (12 percent), New York to 207,828 (10 percent), Texas to 184,707 (nine percent), and New Jersey to 89,722 (or four percent). While the Central American foreign-born compose 6.1 percent of the total foreign-born population, according to Census 2000 they represent 28.1 percent of the 73,561 foreign-born in the District of Columbia, 15.0 percent of the 570,279 foreign-born in Virginia, and 12.8 percent of the 518,315 foreign-born in Maryland (Davy, 2006).

The Central American population in the DC metropolitan area represents the second largest Central American population in the United States, while the South American population represents the fourth largest South American population in the United States.

### *Immigration Status*

Demographic data suggest that DC's Latino population is very diverse as it was formed through a pattern of migration and settlement that is unique to the metropolitan area. Unlike the Mexican majority Latino population in the rest of the nation, the 68% of DC Latinos who are Salvadoran and Guatemalan faced a particular set of legal challenges, which have implications for health care needs and self perceived health status.

Salvadoran and Guatemalan refugees fleeing wars in the 1980s were treated unequally by the former Immigration and Naturalization Service and, as the result of a class action settlement, 200,000 cases-including 13,000 in DC were "frozen" until

1999, leaving most members of this group in legal limbo until the present day, a significant social capital factor (Davy, 2006; Council of Latino Agencies, 2005).

Although the stereotype of undocumented migrants being mostly young adult males is partly supported by a recent comprehensive report by the Pew Hispanic Center (Passel, 2005), a somewhat different picture of the entire group emerges from a more detailed demographic analysis. About one in every six undocumented migrants is a child, accounting for about 1.7 million of the more than 10 million undocumented migrants. A relatively small percentage of the unauthorized migrants are of middle age or older with only about 1.1 million being over 40 years old and virtually none being over age 65. Among the younger adults, there is a predominance of males, but there is also a significant number of women in the undocumented population—about 3 million or 29 percent of the total. For undocumented migrants aged 18–39, nearly 60 percent or about 4.5 million are men; in this age group of the undocumented there are about 146 men for every 100 women.

An additional demographic category is important to any discussion of the undocumented population but is particularly difficult to measure—the U.S.-born children of undocumented parents. Previous work with estimates similar to those presented here has shown that there are about two such U.S.-born children of undocumented migrants for every undocumented child. Applying that ratio to the March 2004 estimates points to well over 3 million U.S.-born children in families headed by undocumented migrants (Passel, Capps, and Fix 2004).

Undocumented women are less likely to be in the labor force (62 percent) than undocumented men are or than women who are U.S. citizens. One reason is that



proportionately more undocumented women are of childbearing age, and undocumented women are more likely than U.S. citizens to have children and remain in the home. Undocumented workers earn considerably less than working U.S. citizens. About two-thirds of undocumented workers earn less than twice the minimum wage, compared with only one-third of all workers. Undocumented workers make up less than 10 percent of the 43 million low-wage workers in the United States (Passel, Capps, and Fix, 2004).

*Latina Profile: Sociodemographic Data by Gender*

Gender specific data shows Latinas make up approximately half of the Latino community and 6 percent of the total U.S. population. By the year 2050, they will make up 25 percent of the U.S. total population: one in four will be a Latina. Furthermore, they represent the youngest population of women in the United States; 40 percent are under the age of 21 years (Anderson, 2002). Beyond demographic changes, Latinas represent the social capital of the community as mothers, daughters, family caretakers, partners, and contributors to the economic well being of their family. Latinas also make major contributions to society as they enter the workforce and, more important, as they nurture future generations (Aguirre-Molina, Abesamis, and Castro, 2003).

Data on marital status indicate that in 1998, approximately one-third (32.8%) of all Latino infants had an unmarried mother, compared to one-fifth (21.9%) of white infants and more than two-thirds (69.3%) of African American infants (Ventura, et al., 2000). African American and Puerto Rican mothers were the groups most likely to give birth out of wedlock (69.3% and 59.5%, respectively), and Cubans

mothers were least likely to do so (28.4%). The percentages of births to unmarried women for other Latino groups were as follows: Mexican American mothers, 39.6%; and Central and South American mothers, 42% (Ventura, et al. 2000). Having children out of wedlock, particularly women who have low levels of education leads to sustained poverty not only for women but also for their children and a stressful life often due to limited financial support of the family from the children's father, with consequent severe financial problems and strained family relations (Sherraden & Barrera, 1996; Zambrana, Scrimshaw, & Dunkel-Schetter, 1996).

### *Education*

Foreign-born Latino dropouts account for 25.3% of all dropouts in the United States. In 2004, the dropout rate of Hispanic 16-24 –year-olds born outside of the United States was 38.4%, which is significantly higher than the dropout rates for US born Latinos of the same age group at 14.7% (US Census Bureau, 2004). In 2005, there was a significant difference in high school graduate rates between native and foreign-born Latinos. While 75% of native-born Latinos completed high school, only 46% of foreign-born Latinos were high school graduates (Kohler & Lazarín, 2007).

According to Census 2000 data, 44.3 percent (or 838,835) of Central American born age 25 and older have at least a high school diploma. Only 8.3 percent have a bachelor's degree or higher (US Census Bureau, 2000). Of the South American-born population age 25 and older, 74.3 percent reported having a high school or higher degree compared to 61.8 percent of the total foreign-born population. Those born in Venezuela (87.6 percent), Suriname (83.1 percent), and Bolivia (82.9 percent) were the most likely to report having a high school degree or higher. Those

born in Ecuador (61.5 percent), Guyana (70.0 percent), and Uruguay (71.7 percent) were the least likely to report having completed a high school education (Gibson & Lennon, 1999). Of the South America-born population age 25 and older, 23.4 percent had a bachelor's degree or higher education, compared to 24 percent of the overall foreign-born population. Those born in Venezuela (43.2 percent), Argentina (34.5 percent), and Brazil (32.0 percent) were the most likely to report having a bachelor's or higher degree. Those born in Ecuador (13.0 percent) were least likely to report having a bachelor's or higher degree, followed by those born in Guyana (16.6 percent) and Colombia (21.6 percent) (Dixon & Gelatt, 2006).

Educational attainment data from the Census (2001) shows forty-three percent of Latinas have a 12<sup>th</sup> grade education or less compared to twelve percent of white women and 11% of Latinas have a bachelor's degree or more compared to 26% of white women. Within the labor force 92% of Latinas 16 years and older are employed compared to 97% of white women. Although the majority of Latinas are in the workforce, they are concentrated in low-paying, part-time, or seasonal jobs and experience twice the rate of unemployment compared to white women (Anderson, 2002).

### *Income*

Among full-time, year-round workers in 1999, the median earnings for South America-born men were about the same as for foreign-born men in general, with each group earning about \$30,000. The South America-born men with highest median earnings were from Argentina (\$41,094), Venezuela (\$36,645), and Uruguay (\$35,639). Those with the lowest median earnings were from Ecuador (\$25,796),

Peru (\$29,673), Colombia (\$30,481), and Bolivia (\$31,261). These low earning groups correspond with the groups least likely to speak English "very well" (Dixon & Gelatt, 2006; US Census Bureau, 1999).

Among full-time, year-round workers in 1999, the median earnings for South America-born women (\$24,000) were about the same as those for all foreign-born women (\$25,000). The South America-born women with highest median earnings were from Argentina (\$30,556), Uruguay (\$28,001), Guyana (\$27,352), and Chile (\$26,813). Those with the lowest median earnings were from Ecuador (\$21,615), Peru (\$22,232), Colombia (\$22,937), Suriname (\$24,981), and Bolivia (\$24,994) (Gibson & Lennon, 1999; Dixon & Gelatt, 2006).

The total median income of Hispanic households in 2004 was approximately \$36,000. This was less than three-quarters of the median income of non-Hispanic White households, which was about \$48,000 (US Census Bureau, 2004). Among the lowest income Hispanic households, with median incomes of about \$30,000, were Dominican households and Honduran households. Total income for Central Americans was \$36,369 with Hondurans at \$31,526, Guatemalans at \$37,912 and Salvadorians at \$36,789 000 (US Census Bureau, 2004). Within Montgomery County, Maryland it has been reported that the median income of households with foreign-born head or spouse is 85% of the median of native-born households (\$69,830 and \$82,365, respectively), which shows a higher income for both groups than the national average (US Census Bureau, 2003).

#### *Length of Time in the United States*

As the immigration population grows, studies of their health outcomes are becoming of increasingly crucial interest to health care researchers and policy makers (Dey & Lucas, 2006). Since recent immigrants to the United States are most likely to be from the Latin American countries, little research to date has endeavored to sort out length of time in the United States as an important factor in the reduction of health disparities (Weinick, Jacobs, Stone, Ortega & Burstin, 2004). Today, one out of every ten Americans was born outside of the United States while just twenty-five years ago only 6% were foreign-born.<sup>6</sup> As recently as the 1960s, the proportion of all newly arriving immigrants who were from Europe was 53%, while just 12% were from Mexico and 6% from Asia (McCarthy & Vernez, 1997). By 1998, the share of new arrivals that were born in Europe had declined to 14% and the share born in Mexico and Asia increased to 20% and 32% respectively (Immigration and Naturalization Services, 1998).

Currently, over one-half of the immigrants to the United States are from Latin America (36% from Central America, 10% from the Caribbean, and 6% from South America) (Schmidley, 2003). These statistics indicate that many Hispanics are recent immigrants to the United States and their lack of familiarity with the United States healthcare system, language barriers, or fear of being deemed a public charge could contribute to disparities in health (Weinick, Jacobs, Stone, Ortega & Burstin, 2004).

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<sup>6</sup> These data reflect ALL foreign-born, not just those from Central and South America.

**Table 2.1 Foreign-Born Population by Year of Entry & Hispanic Origin Type**

<i>Year of Entry</i>	<i>Total Hispanic</i>	<i>Mexican</i>	<i>Puerto Rican</i>	<i>Cuban</i>	<i>Central American</i>	<i>South American</i>
2000 or Later	20%	21.2%	11.3%	10.8%	20%	25.8%
1990-1999	36.5%	37.9%	21%	23.7%	38.1%	32.9%
1980-1989	24%	23.5%	17.6%	20.3%	27.7%	21.3%
1970-1979	11.6%	11.4%	19%	12.6%	9.6%	12.5%
Before 1970	7.9%	6%	31.1%	32.6%	4.6%	7.5%

SOURCE: US Census Bureau, Current Population Survey, Annual Social and

Economic Supplement, 2004, Ethnicity and Ancestry Statistics Branch, Population Division.

These selected sociodemographic data highlight the impetus for further research on Central and South American men and women living in the United States. Despite the historic presence of Latinos in the United States, it is important to note that health information on Hispanics has only recently become available. Although the first comprehensive Hispanic health survey in the US—the Hispanic Health and Nutrition Examination Survey (HHANES) was conducted in 1982-84, the leading causes of death for all Hispanics were not published in the Department of Health and Human Services’ (DHHS) annual report to Congress until 1993 (Zambrana & Carter-Pokras, 2001). As we attempt to move beyond documentation of health disparities toward improvement initiatives designed to reduce and eliminate them, more refined data will be required especially among this underserved and underrepresented group of Central and South American men and women.

### *English Language Proficiency*

Limited English language proficiency (LEP) coupled with low education and literacy levels substantially reduce access to and quality of services received (Bartmann, 1997; COSSMHO Reporter, 1999, 2002; Ellwood, 2003; Halfon, 1997; National Council of La Raza, 1998; Zambrana, 2004). Almost one-quarter of Hispanics (4,548,677 or 23%) in the United States are linguistically isolated—that is, no one 14 years old or over speaks only English, and no one who speaks a language other than English speaks English “Very Well” (Kempe, 2003; Therrien and Ramirez, 2001).

Information on limited English language proficiency show Latinos face language barriers as a result of a lack of providers who speak their native language and less than adequate interpreter services in health care settings (Carter-Pokras, 2004; Schmidt, Hart & Schur, 1995; Woloshin, Bickell, Schwartz, et al., 1995; Carrasquillo, Orav, Brennan, et al., 1999; Jacobs, Lauderdale, Meltzer, et al., 2001). Additional research that has explored relationships between LEP and health care have found that compared with English-speaking Hispanics, Spanish speakers are less likely to use healthcare services (Zambrana & Logie, 2000; Weinick, Jacobs, Stone, Ortega, & Burstin, 2004; Solis, Marks, & Garcia, et al., 2001) and to have a usual source of health care (Schur & Albers, 1996; Kirkman-Liff, & Mondragon, 1991; Weinick & Krauss, 2000). Socioeconomic position, education level, and primary language all affect whether Latinos will seek out health information, and how they will interpret that information (Nielsen-Bohlman, Panzer & Kindig, 2004).

### *Health Literacy*

Another aspect of health information is health literacy, or “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (Healthy People, 2010). Recent research has shown that there is a significant deficit in functional health literacy and more importantly, as an important variable in health outcomes. There is an assumption of society assuming more responsibility for their own health care needs and services (Selden, Zorn, Ratzan, & Parker, 2000, and health literacy is an essential element for pertinent health decisions. In the US, health literacy is often difficult without English literacy—or the ability to read, write, and speak English. In fact, an estimated 75% of those with chronic physical or mental health problems in the US have limited literacy (Weiss, et al., 1994).

According to one study of health literacy (Gazmararian et al., 1999), 53.9% of Spanish-speaking participants had either inadequate or poor functional health literacy. Research indicates that those with low levels of health literacy are more likely to report poor health, lack a full understanding of their health problems and treatment, and be at a greater risk of hospitalization (Baker, et al., 1997). Moreover, studies suggest that limited literacy among those with asthma, hypertension, and diabetes is correlated with lower levels of understanding these chronic conditions (Williams, et al., 1998a; Williams, et al., 1998b).

### *Health Access*

Access to healthcare is an important prerequisite to obtaining quality care. Some access barriers, whether perceived or actual, can result in adverse health



outcomes and a perception of participants self perceived health. Of the major measures of access, the lack of health insurance has significant consequences.

Though Latino adults in the metropolitan area have similar or greater need for care as other adults, they fare worse than whites and African Americans on most health care access indicators (Aragon and Lillie-Blanton, 2004). In Maryland, the uninsured rate among low-income Latinos is 64%, the highest for any population subgroup (Martinez and Carter-Pokras, 2006; MHCC, 2004). Research provides evidence that a sizable share of the differences in whether a person has a regular source of care could be reduced if Latinos and African Americans were insured at levels comparable to those of whites (Lillie-Blanton and Hoffman, 2005).

Hispanic families and families that are poor and have low educational levels are more likely to report problems getting health care. In general, Hispanics and people of lower SEP are more likely to perceive unmet health care needs. Households headed by Hispanics were more likely (13%) than those headed by non-Hispanic whites (10%) to report difficulties obtaining care (MEPS, 1999). Latinos and those with lower SEP are also more likely to experience difficulties or delays due to financial or insurance reasons, forego health care because the family needed the money, and have low confidence that they can get health care when they need it (MEPS, 1999).

Extensive work has been conducted on barriers to access to care including more recently those created by both welfare and immigration reform (DeNavas-Walt, Proctor, & Mills, 2003; Ku & Matani, 2001). Multiple reasons for Latino groups' inability to access health insurance exist, including low level of employer-sponsored

coverage. Only 43% of Latinos get coverage through their own employer or that of a family member, well below the national rate of 64% (Fix, 1999; Quinn, 2000).

Eligibility and enrollment barriers for low income Latinos include: lack of awareness of available health care services, complex application process, fear and mistrust of government or providers, and literacy, language, and logistical barriers (Bauer, 2000; Murguía et al., 2003; Zambrana, 2004; Zambrana and Carter-Pokras, 2004; Martinez and Carter-Pokras, 2006).

The uninsured is not equally divided among all demographic and income levels. Among all demographic groups Non-Hispanic whites is the group to most likely have health insurance (87%). They are also more likely than other racial and ethnic groups to receive coverage from their employer. Hispanics have the largest percentage of uninsured (34%), and the lowest percentage (40%) of people with employer coverage compared to non-Hispanic whites with employer coverage (69%). Among low-income populations 44% of Hispanics are uninsured, a higher percentage than non-Hispanic whites (29%), African Americans (29%), and Asians and Pacific Islanders (37%). Low-income Hispanics populations (20%) are least likely compared to Non-Hispanic whites (31%) to receive employer-based coverage (20%) (Current Population Survey, 2005). According to the *Agency for Health Care Research and Quality* (2005), Latinos utilize less health care services and are significantly more likely than non-Hispanic whites to lack access to care. In the Washington metropolitan area, Latinos are more likely to lack health insurance than Latinos in the rest of the United States, and to have lower access to care. Both the Latino Health Care Collaborative Survey (2004) and the Kaiser Family Foundation's D.C. Health

Care Access Survey (2003) found approximately four out of ten Latino adults in D.C. lack health insurance.

The strongest predictors of health care use for Latino immigrants are economic status and insurance coverage (AHRQ, 2005; DeNavas-Walt, Proctor, & Mills, 2003). Having less than a high school education often results in jobs that do not provide health benefits, and lack of insurance is one of the most critical issues facing Latino immigrants (Carrillo, Treviño, Betancourt, & Coustasse (2001). Only 1 in 5 undocumented immigrants living in the United States has insurance through their employer, 32% and 77% of undocumented versus documented immigrants respectively (Goldman, Smith, & Sood, 2005). In 2000, uninsured Latinos with incomes below the federal poverty line would have to spend as much as 40% of their annual income to purchase nonemployer sponsored health insurance (Quinn, 2000). Many undocumented immigrants do not purchase health care coverage since it is prohibitively expensive. A recent study assessing barriers to health care found affordable health insurance is not the only financial barrier. Prohibitive costs and inadequate funds lead to not seeking preventive services (Martinez & Carter-Pokras, 2006).

Having a “medical home” or a distinct location where one can obtain integrated health care services, offers patients an opportunity to develop relationships with accessible clinicians who are accountable for addressing most health care needs. It greatly increases the likelihood that a patient will receive preventive care, such as blood pressure and cholesterol monitoring; receive flu shots; and have pap smears and mammograms (American Academy of Family Physicians, 2000). In general, racial

and ethnic minorities are less likely to have a usual source of care. For instance, approximately 87% of the population has a specific source of ongoing care and 13% lack such a source of care. Hispanics (24%) are more likely than non-Hispanic whites (11%) to lack a source of ongoing care (NHIS, 2000).

Over half (53%) of D.C. Latinos reported that they had visited a doctor for a routine checkup within the last 12 months compared to three out of four D.C. whites or all US Latinos (Council of Latino Agencies, 2005). Among Latinos surveyed by Carter-Pokras, et al., 2005 (52.9%) of men and 77.8% of women reported that they had a doctor visit for a routine check-up within the last 12 months. As expected, those with health insurance were more likely to have had a routine checkup during the last 12 months (80%) than those without health insurance (53%).

Analyses of the National Longitudinal Study of Adolescent Health (Wave 1) showed that Central and South American adolescents with incomes above the poverty level were more likely to receive a routine physical examination than those with incomes below the poverty level. Their rates of uninsured and private insured were similar to Mexican origin and their rates of public health coverage were lower than all other subgroups (Sarmiento et al., 2004).

Having insurance coverage and a regular doctor does not guarantee that individuals will receive necessary medical treatment. All too frequently, logistical barriers—poor transportation, inability to get care (e.g., schedule appointments quickly or during convenient hours), and excessive time spent in waiting rooms— affect a person's ability and willingness to obtain and adhere to needed care (Millman, 1993; Martinez & Carter-Pokras, 2006). One important structural barrier is

the ability to gain referral to a specialist. In this era of managed care, primary care providers are often called upon to monitor, approve, and coordinate referrals to other providers. About a quarter of patients report difficulty getting referrals, and these patients tend to have less trust, confidence and satisfaction with their providers (Grumbach, et al., 1999). Many primary care providers experience pressure from managed care organizations to limit referrals, and 17% of primary care providers believe pressure compromises patient care (Grumbach, et al., 1998) Racial and ethnic minorities are more likely to have trouble receiving referrals to specialists. Problems with access to specialists are disproportionately borne by priority populations as reported by *Healthy People 2010*. For example, 31% of Hispanics compared with 19% of non-Hispanic whites, report trouble obtaining referrals.

Less information is available on the rates of insurance among Central and South Americans women. In the year 2000, 29% of all Latinas living in the United States reported not having health insurance, compared to 17% of blacks and 9% of white women. The disparity in health insurance status between Latinas and white women remains constant at all ages and income levels (Current Population Survey, 2000).

In 1998, 56% of Latino immigrants did not have health insurance, while recently arrived immigrant groups, encompassing those from Central America, having the highest proportion of uninsured, including 55% of Salvadorians', 55% of Mexicans, and 58% of Guatemalans (Carrasquillo, Carrasquillo, and Shea, 2000). Cubans, who in general have resided in the US longer than any other group, have higher rates of job-based coverage and public health insurance than any other

Hispanic group (Current Population Survey, 2000). But rich or poor, recent immigrants or not, Latinas at all levels of society experience less health coverage and in turn less access to health care services than their white counterparts (Rodriguez & Carrasquillo, 2003).

Importantly, in the case of Latinas, stereotypes that all Latinas are immigrants, do not speak English, cannot concisely articulate their symptoms, have too many children, and have come to the United States to get government handouts affect not only the ways dominant culture providers treat their Latina patients but the kinds of public policies that are designed to determine their access to health care (Hernandez and Charney, 1998; Lillie-Blanton and Hudman, 2001; Perez, 2000; Reyes, 2001; Zambrana and Dill, 2006).

### *Health Behaviors*

#### *Tobacco Use*

Each year, an estimated 438,000 Americans die as a result of smoking or exposure to secondhand smoke, and for each person who dies from a smoking-related disease, about 20 more are living with a smoking-attributable illness (American Cancer Society, 2007). In 1997–1998, 34.5% of American-Indian or Alaska-Native, 23.5% of white, 21.9% of African-American, 13.8% of Hispanic, and 11.2% Asian/Pacific-Islander women were current smokers (USDHHS, 2001). From 1965 through 1998, the decline in smoking prevalence among Hispanic women was significantly less than among white and African-American women. In 1990–1994, smoking prevalence for high-school senior girls was highest among American Indians or Alaska Natives (39.4%) and whites (33.1%) and lowest among Hispanics (19.2%),

Asian Americans or Pacific Islanders (13.8%), and African Americans (8.6%) (CDC, 2006). Lung cancer deaths are about three times higher for Hispanic men (23.1 per 100,000) than for Hispanic women (7.7 per 100,000). The rate of lung cancer deaths per 100,000 was higher among Cuban-American men (33.7) than among Puerto-Rican (28.3) and Mexican-American (21.9) men (American Cancer Society, 2007). Not surprisingly, therefore, a National Cancer Institute panel has identified the Latino population as being at high risk for smoking as length of time of living in the United States increases (Glynn, Anderson, & Schwartz, 1991).

Declines in the prevalence of smoking have been greater among Hispanic men with at least a high school education than among those with less education. Research has shown factors that are associated with smoking among Hispanics include drinking alcohol, working and living with other smokers, having poor health, and being depressed (USDHHS, 1998). Within the Washington DC metropolitan area similar rates of tobacco use have been found. Data from the 2002 Maryland Behavioral Risk Factor Surveillance Survey (BRFSS) reported a smoking rate of 17.8% (CDC, 2004b). In Washington, DC, the Department of Health found a 17% smoking rate (District of Columbia, 2005). Virginia's 2000 Health Survey classified Hispanics by language use and reported that 13% of predominately Spanish speakers smoked as compared to 14% of mixed language, and 21% of predominately English speakers.

Perez-Stable et al., (2001) found as Hispanic women become more acculturated into the dominant culture of American society, their prevalence of smoking increases compared to less acculturated Hispanic women. Among Hispanic

adolescents as well, smoking rates are higher among those who are more acculturated than among those who are less acculturated or bilingual (Epstein, Botvin, & Diaz, 1998), and among immigrant Latinas than non-Latina whites (Otero-Sabogol, Sabogal, & Perez-Stable, 1995; Sánchez-Johnson, L., Spring, Sommerfeld, & Fitzgibbon, 2005).

There is a dearth of research investigating reasons for smoking among Latina women and even less on immigrant and Central and South American women (Cox, et al., 2005). Economic and social factors may influence the prevalence of smoking. Given the lower rates of insurance and access to medical care may show that Latino smokers will be less likely to be advised by health care providers or have access to smoking cessation treatments (Houston, et al., 2005). These data raise the need for exploration of tobacco use among Central and South American men and women, especially by their length of time in the United States.

#### *Alcohol Use*

A major problem for Latinos in the United States is the high level of alcohol consumption per capita among both adolescents and adults (Caetano & Galvan, 2001). Studies that examine heterogeneity in drinking patterns are also found among different nationalities within specific ethnic groups (Dawson, 1998). Blacks whose ancestry is Caribbean consumed less alcohol compared with Blacks in general. Hispanic Americans of Central American, South American, or Caribbean ancestry consume less alcohol than Hispanics in general (including Hispanics of Mexican or Mexican American ancestries). Among Asians, Japanese Americans consume more alcohol than Asian Americans of other national origins do (Dawson, 1998).



Heterogeneity in drinking patterns also varies by place of birth. For example, Asians and Pacific Islanders born in the United States have lower alcohol abstention rates than those born elsewhere (Makimoto, 1998), and U.S.–born Mexican American women have higher rates of alcohol dependence than Mexican American women born outside the United States (Caetano et al. 1998).

Data trends show that Hispanics have higher prevalence rates of frequent heavy drinking (5 or more drinks at a sitting). The rate of binge drinking among US Hispanics has increased from 18% in 1991 to 24% in 2003 (SAMHSA, 1999; 2003). Lee, Markides, & Ray (1997) found the prevalence of past heavy drinking among Mexican American and Puerto Rican males ranged from 28-35% while the rates for Cuban American males ranged from 7-16%. The rates for Hispanic women were much lower (1-8%). The average years of past heavy drinking ranged from 2.3-14.9 years, while the alcohol consumption during the past heavy drinking period ranged from 24.4-44.0 drinks per week. Past heavy drinkers tended to consume more alcohol at present than did never heavy drinkers with the greatest differences found for Mexican American females. Comparisons of the risk factors and health indicators by drinking status revealed a higher prevalence of smoking among past heavy drinkers (50-60%) versus never heavy drinkers (34-43%). Past heavy drinking Mexican American females also reported significantly more chronic conditions and depressive symptoms than did never heavy drinkers. Cox, et al., (2005) in a landmark study of Central and South American men and women found the overall rate of current alcohol use in their study is similar to national data of 60% of Hispanic adults reporting no alcohol use in past 30 days. Additionally, as research shows heavy drinking (five or

more drinks on one occasion) is a considerable health risk among Latino men (NIAAA, 2004), although differences in drinking patterns may be influenced, in part, by country of origin (Nielsen, 2000). Research findings show that current smokers are more likely to use alcohol than nonsmokers (Cox, et al., 2005). However, little research has focused on co-morbidity of alcohol and nicotine dependence within Latino populations. Additional research is needed to enhance the understanding of alcohol use and its relationship in the context of Latino tobacco use initiation, maintenance, treatment, and relapse prevention. Understanding more about the prevalence and predictors of alcohol problems among Hispanic national groups is particularly important because trend analysis of problems indicate a considerable increase in problem prevalence among Hispanic men between 1984 and 1995, from 9% to 16% (Caetano & Clark, 1998). Given the overall research aims of this dissertation study, these behaviors of tobacco use and alcohol consumption may prove to have serious implications in the general health assessment and self-perceived health status among Central and South Americans.

### *Perceived Discrimination*

Perceived discrimination research has flourished in the past several years to better understand its impact on racial and ethnic health inequalities (Cardarelli, Cardarelli, & Chiapa, 2007). The health care encounter is a setting in which racial/ethnic disparities can arise and patients who experience disrespect in this encounter may be less likely to access health care and report poorer or fair self-perceived health status (Blanchard & Lurie, 2004; Schulman, et al., 1999; Smedley, Stith, & Nelson, 2002).

Most research has focused on perceived discrimination between African Americans and non-Hispanic whites and considerably less research has focused on the Hispanic community. Health consequences from experiences of discrimination result from a complex interaction with the magnitude of the experience itself, the accumulation of past life experiences, coping mechanisms, and other psychosocial factors (Williams, 1999; Williams & Jackson, 2005; Cardarelli, Cardarelli, & Chiapa, 2007).

One study that looked at the negative perceptions of the patient-provider relationships by race, ethnicity and gender found over 14% of African Americans, 19% of Latinos, and 20% of Asians reported they had been treated with disrespect by their doctor (Blanchard & Lurie, 2004). Interestingly, men were significantly more likely than women to perceive being treated with disrespect by the doctor, and the percentage varied by race/ethnicity finding that Asian and Hispanic men (24% and 23% respectively) were more likely than Black men (17%) or white men (11%) to perceive discrimination in their health care encounter (Blanchard & Lurie, 2004). In a study among Black and Latino immigrants perceived discrimination may also be an important predictor of poor mental health status (Gee, et al., 2006), and findings of decreasing mental health status as immigrants acculturate might partly be related to experiences with racial discrimination.

Perceived discrimination for women who rely on their health care providers to answer their questions during a consultation can have important effects on their adherence to treatment regimens and alleviate their apprehensions regarding emerging health conditions or secondary conditions or comorbidities (Zambrana &

Dill, 2006). A study found that 34% of Latinas surveyed reported concerns about quality of care received, while only 20% of white women and 24% of African American women reported such concerns (HJ Kaiser Family Foundation, 2001). Although this study reported few women (10%), stating that their doctors did not take the time to answer their questions fully, Latinas (14%) was more likely than African American (8%) or white women (9%) not to have their questions fully answered. In addition to reporting that their questions were not fully answered, 17 percent of women reported that in the past two years, they had not understood or remembered information they received from their provider during a visit. Latinas (20%) were significantly more likely than African American women (14%) to have left a providers office without understanding or remembering their provider's instructions (HJ Kaiser Family Foundation, 2001).

Although data are not available on the level of trust that Latina patients have in their providers and the institutions in which they receive health care services, trust is based on perceived competence, compassion, privacy and confidentiality, reliability and dependability, and communication (Pearson & Raeke, 2000). Reported barriers including linguistic and legal (lack of a social security number, immigration status fear) to health care by Latinos in general would suggest that trust is a Central concern among Latinas (Martinez & Carter-Pokras, 2006). These data imply that Latinas are concerned about quality of care, questions left unanswered, and instructions not understood. Thus low income Latinas, who are less likely to challenge their providers or to have the language or literacy skills or health knowledge to explain their medical history and symptoms succinctly, may experience increased anxiety, less ability to

comply with regimen, greater likelihood of incurring medical errors, and, in turn, less favorable health outcomes (Zambrana & Dill, 2006).

### *Depression*

Although we have an understanding of the mental health needs of the three largest Hispanic populations in the United States: Mexicans, Puerto Ricans and Cubans, the study of emerging Hispanics, such as Dominicans, South Americans and Central Americans should be of high priority for health care researchers working within the Latino community. The numbers of these Hispanic groups have expanded greatly recently, but we know little about their specific mental health outcomes (Vega & Alegría, 2001; Alegría, et al., 2000; González, & González-Ramos, 2005).

Although there have been a number of studies examining depression among Latinos, and Mexican Americans in particular, there is still a modest understanding of Latino subgroup variation (Stone, Rivera, & Berdahl, 2004).

Based on Guarnaccia et al.'s (2005) review of three national mental health studies—the Hispanic Health and Nutrition Examination Survey [HHANES], the Los Angeles site of the National Institute of Mental Health Epidemiologic Catchment Area Program [ECA], and the Mexican American Prevalence and Services Study [MAPSS Study]—important statements about the mental health status of Hispanics in the United States may be made. Predicated on the findings of the Hispanic Health and Nutrition Examination Survey, Guarnaccia et al. (2005) noted that in comparison to Cubans and Mexican Americans, Puerto Ricans had much higher rates of both symptoms of depression and depression cases, and a greater prevalence of Major Depression Episode (a major mental health disorder). In their analysis of the National

Latino and Asian American Study [NLAAS], Alegría et al., (2007) have also observed that Puerto Ricans had the highest overall lifetime and past-year prevalence rates of psychiatric disorders (e.g., depressive disorders, anxiety disorders, substance use disorders, and overall psychiatric disorders) in comparison to Cubans, Mexicans, and other Hispanics. Perceived sense of discrimination and failed socio-economic attainment may be two factors that negatively affect the psychological status of Puerto Ricans. Review of the National Latino and Asian American Study appears to suggest that overall psychiatric disorder prevalence rates are higher among Hispanics who had migrated to the United States before the age of 13 years or after the age of 34 years than among those who had migrated at other ages (Alegría, et al., 2007).

Latinos often mistake depression for nervousness or tiredness, and they think of depression as something that is temporary: *“I’m a bit down; it will pass,” “It’s just my nerve, that’s all,” or “It’s just a nervous attack; a nice cup of tea will help calm my nerves.”* Besides mood changes, Latinos have a tendency to associate depression with stomach sickness, back pain, and headaches (SAMHSA, 2008). Latina women are at high risk of experiencing depression. Most studies (Vasquez, 2003; Alderete, et al., 2000; Stone, et al., 2004), are consistent with previous research (excluding Central and South Americans), which shows that depression is significantly more prevalent in Latino women than in men. Given that many of women’s traditional roles are given low societal value, and their roles may be unrewarding, multiple factors may contribute to higher levels of depression. Women’s work outside the home may be associated with gender, ethnic, and class discrimination. For example, overt manifestation of anger is discouraged; and women feel (and often have) less control

in their lives. Among Central and South American women, loss of family networks from country of origin may be at a higher risk for depression.

One role, which has not been fully explored, is the role of caregiver, which may be especially relevant for women, more than men, who fill the role of caring for sick or disabled relatives, in addition to fulfilling work and child-rearing responsibilities. The role of caregiver appears to fall on women uniformly, regardless of income, race/ethnicity or even marital status. The extent of their responsibilities, however, does vary with family resources (Commonwealth Fund, 1999).

The demands of care giving may take a toll on caregivers' self-perceived health status and well-being. One of four women caring for sick or disabled family members rated herself as being in poor or fair health, compared with one-sixth of other women (17%). More than half (54%) of women caregivers had one or more chronic health condition, compared with two-fifths (41%) of other women. Caregivers also reported higher rates of mental health concerns: 51% reported high depressive symptoms—a far higher proportion than the 38% of women not currently caring for sick or disabled relatives who reported these symptoms (Commonwealth Fund, 1999). Women's social status and relationships also shape care giving. Women who care for others—either informally in the home or in hospitals, clinics and nursing homes are valuable health resources. Whether women are formal or informal caregivers, the status of their health in turn will affect society as a whole (Oleson, 1997).

### *Chronic Conditions*

Limited data exist on the health conditions of Central and South Americans in the United States. Most studies regarding Latino health have been conducted on Mexican origin groups (Weinick, 2004; Ailinger, 2004; Juniu, 2000; Menjivar, 2000; Rutherford, 2002). The limited information available on Central and South Americans mainly consists of qualitative studies in both country of origin and United States (Bauer, 2000; Murgia, 2003; Martinez, 1997; Menjivar, 2003; O'Malley, Renteria-Weitzman, Herta, Mandelblatt, Latin American Cancer Research Coalition, 2002; Rutherford, 2003).

Determining the causes and patterns of chronic conditions is highly complex. For many chronic conditions such as diabetes and autoimmune diseases, the exact cause is not well understood. Therefore, diagnostic tests have not been developed for many chronic illnesses (Primomo, 1995). Because the onset of chronic illness is often gradual, it is difficult to track the exact number of cases at any one time. Additionally, multiple factors contribute to the development of multiple chronic illnesses. Multiple factors may interact and combine in specific ways to place women at higher risk for an illness versus a single risk factor alone (Primomo, 1995).

Instead of identifying diseases and then searching for a cause, we need to begin by identifying the major areas of activity that constitutes women's lives (Doyal, 1995). This becomes important since we usually consider physical health as a state in which people can do what they have to do or want to do. When a woman is diagnosed



the illness will affect the physiological state of the body, but in essence, little is known about illness as a disturbance of a woman's social lives. As Lorber (2000) contends, "the perception that something is wrong and the guesses as to the cause are always experienced in a social context.

When a woman is diagnosed with a chronic illness, "convictions regarding one's own identity become shaken, frequently altering both self perceptions and self-concept" (Gordon, Feldman & Crose, 1998). Women might adapt to the illness experience "within a social climate that is frequently far from supportive" (Gordon, Feldman & Crose, 1998). Control over an illness and control over one's life resurface in other studies that examine the effects of a chronic illness on quality of life (QOL) (Burckhardt, 1985; Jordan et al, 1998). Burckhardt (1985) found that quality of life (QOL) is affected by factors such as internal control over one's health (20%), negative attitude (15%), perceived support (10%) and the severity of impairment (25%). Subjects who believed they had a responsibility over their health, who "attributed physical health to taking good care of themselves and who believed that they had the power to make themselves well had higher QOL scores" (Burckhardt, 1985) than those who disagree with those beliefs. For women who have been diagnosed in this "social climate" that is far from supportive is an important area of research because the social context is an integral part of any illness.

Women with chronic conditions experience the material limits of their bodies, not as solid boundaries, but as fluid, permeable borders that occupy a specific space. Gloria Anzaldua calls such a space *la frontera*/the borderlands, a "place of contradictions," a "landscape of shifting and multiple identity and integrity" (1999:

Pg. 19). She recognizes that to dwell within the borderlands “is like trying to swim in a new element, an alien element insofar as it requires that we refuse both to abandon history and to embrace uncritically the future (Cohen & Weiss, 2003).

Although limited information is available on antecedents of chronic conditions and consequences in terms of quality of life and self-perceived health status among Latinas with chronic health conditions, it is known that Latinas are less likely to use health care services and to know when they have a chronic condition (Zambrana & Dill, 2006). Disparities in access to health care, risk factors (e.g. obesity), and morbidity (e.g. diabetes) persist among persons under 65 years of age of Hispanic origin (NCHS, 2004). Latinos as a whole are at increased risk of cervical, liver, gallbladder, and stomach cancer (American Cancer Society, 2003). Latinos have higher age-adjusted mortality rates for diabetes, homicide, chronic liver disease, and HIV infection than the total population and non-Latino whites (Carter-Pokras and Zambrana, 2001; Zambrana and Carter-Pokras, 2004). Recent Latino immigrants have increased risk of infectious disease, poverty, poor diet, alcohol, and smoking, occupational exposures (e.g. asbestos, tar), and low access to care.

There is a familial risk factor associated with many common diseases (U.S. Surgeon General, 2005). Sometimes the exact genetic mechanism may be known. For other diseases such as coronary artery disease, the cause may be multifactorial and involve the interaction between genes, the environment, and risk behaviors. To date, two cohort studies (Sorlie, Baxcklund, Johnson, and Rogot, 1993; Wei, Mitchell, Haffner, and Stern, 1996) have reported mortality from cardiovascular disease among the Hispanic population.

A 2003 American Heart Association (AHA) study of over 1,000 women revealed the lack of understanding women have of the dangers of Cardiovascular Disease (CVD). According to the results, a mere 13% of women in the United States believe that heart disease and stroke are the greatest threat to women. These data reveal a lack of knowledge and understanding a majority of women have for their own most serious health risk. Additionally, despite the fact that minority women face the highest risk of death from heart disease and stroke, they have lower risk factor awareness. (Mosca, et al., 2004). The American Heart Association's first national survey in 1999 found that only 30% of women spontaneously listed heart disease as women's leading cause of death, a figure that increased to just 34% in the 2000 survey. In 2003, those figure jumped to 46%, which was a significant improvement. (American Heart Association, 2004).

Despite the fact that awareness of heart disease as the number one killer of women has increased since 2000, a knowledge gap remains particularly for women younger than age 45 and for racial/ethnic women. African American women and Hispanic women have higher prevalence rates of hypertension, obesity, physical inactivity, and diabetes than white women, yet are less likely than white women to know that being overweight, smoking, physical inactivity, high cholesterol and a family history increases their CVD risk. For instance, 44% of white women listed being overweight as a risk factor, compared to 36% among both Hispanic and African American women. While 35 % of white women knew that a family history of CVD increased a women's risk, 22% of Hispanic and just 12% of African American women were aware of this risk factor (Mosca, et al., 2004).

Latinas report slightly higher rates of arthritis, asthma, diabetes, and osteoporosis than do white women (Henry J. Kaiser Family Foundation, 2001). The National Health and Nutrition Examination Survey found that 38% of Mexican Americans with diabetes were not previously aware that they had diabetes, compared to 33% of whites. Mexican American women (22.3%) are the Latino subgroup most likely to have high blood pressure, with higher rates than white women (19.7%) but lower rates than black women, 36.4 percent (National Center for Health Statistics, 2001).

Latinas (54%) were less likely than African American women (64%) or white women (58%) to have had their blood pressure checked in the previous year (Brown, et al., 1996). Twenty-two percent of Mexican American women had hypertension compared to 18 percent of Puerto Rican women and 14 percent of Cuban women (Crespo, Loria, and Burt, 1996). Although more than 95 percent of hypertensive Latinas knew of their condition, only 86 percent of Mexican American and Puerto Rican and 79 percent of Cuban women reported receiving necessary treatment. Of those who received treatment, only 44 percent of Mexican American, 42 percent of Puerto Rican, and 30 percent of Cuban women had their hypertension under control (Pappas, Gergen, and Carroll, 1990).

These selected chronic condition factors while important to show the disproportionate morbidity among the Latina population, only highlight the data reported on the major (Mexican, Puerto Rican, Cuban) Latino subgroups. Little is known about Central and South American women.

### *Sources of Health Information*

Health care consumers need health information to decide when to seek medical care, choose appropriate providers, and adhere to treatment recommendations. Such information may be distributed via caregivers, direct-to-consumer advertisements, public health campaigns, or publications from health-focused associations. Additionally, computer related sources include interactive health communication, software, and the Internet. Yet frequently, the very populations with the greatest needs have the least access to information. Differences in access to computers are of particular concern, as the delivery of information grows more reliant on electronic dissemination.

Immigrants often possess a distinguishing package of characteristics that set them off from more established local populations, including language, ethnicity, culture, income, type of job, and perhaps even education and legal status. Self-perceived health status may improve or deteriorate as cultural knowledge's and behavioral traditions engage the daily challenges of accessing health information. The assumptions of the biomedical model are principled on individual self-responsibility and knowledge of technology that may serve as barriers to increasing access to important health information and health care resources among the Latina/o immigrant community. Thus, researchers cannot assume that their information practices will be similar to that of, for example, native-born residents who have been raised in an information environment based on a mainstream configuration of public libraries, schools, service providers, government offices, television and, now, the Internet (Courtright, 2004). For example, two-thirds of all Internet users in the United States expect to find information about health, government, news, and other everyday life

needs on the Internet (Fox & Rainie, 2002). Internet use priorities among immigrants may differ from those of native-born groups (Chaudhry, 2000) and access disparities by language and ethnicity persist (Martin, 2003). Telephone usage patterns also tend to vary by income, race and ethnicity (Mueller & Schement, 1996) and currently only 91.4% of Latino families in the U.S. have a telephone installed (FCC, 2003).

In general, Hispanics and Asians have greater difficulty accessing health care information. About 43% of adults report that it is “not very easy” to understand information from their doctor’s offices. Differences between racial and ethnic group data indicate that Asians (58%), and Hispanics (54%), compared with (40%) of non-Hispanic whites have harder time comprehending doctor-provided health information (Commonwealth Fund Health Care Quality Survey, 2001).

The Internet is seen as the number one medium of choice for researching health information by US Hispanics. According to the 2005 AOL/Roper study, 54% of online Hispanics believe that researching their health issues or conducting medical price comparisons on the Internet is the way to go. ComScore media metrics reports that during June 2006, 34.4% have visited content within the health category (Escanaverino, 2006). In a 1994 telephone survey study, which focused on Mexican Americans, only 13% of 522 adult Hispanic respondents in the Southwest used media as the main source of information for physicians, while 19% used media for information regarding health services. Family and friends were main sources. About 75% of the respondents had a family physician, with the mother (68%) making health care decisions for the family. A large majority of respondents said that neither the

physician's sex nor race were factors in choosing physicians (Hudson & Watts, 1996).

In a study that examined health disparities and advertising through mainstream magazines, Duerksen, et al., (2005), found that many Black and Hispanic women read mainstream White-oriented magazines. The authors suggest it readers give more serious consideration to, and are more influenced by, health-related content in magazines that present them with culturally aligned role models and information of personal relevance.

In a landmark study that looked at Colombians, Ecuadorians, Dominicans, and Puerto Ricans from New York City, O'Malley, Kerner, and Johnson (1999), found that all ethnic and age groups cited a health professional as the most common source of health information (40% overall). The next most commonly cited sources overall were television (21%), hospitals or doctor's offices (18%), books (17%), magazines (15%), brochures/pamphlets (11%), and radio (8%). Among immigrants, as the proportion of life spent in mainland U.S. rose, increasing percentages cited magazines and decreasing percentages cited radio as a health information source. Less educated persons and more recent immigrants were most likely to report inability to get health information.

Focus groups conducted among Latinos in Maryland suggest that Latinos go to friends, family, nurses, social workers, community clinics/centers and hospitals for their health advice (Carter-Pokras et al., 2005). Health interview survey results from DC, Baltimore and Virginia confirmed the reach of television, radio, family and friends, and health centers/clinics. For example, 34.1% of Latino adults in DC

reported obtaining health information from the radio, 76% from television, 26.1% from the newspaper, and 23.1% from family/friends (Council of Latino Agencies, 2005). Given the variation in sources of health information, identification of those most commonly used is important to target Central and South American men and women as an indicator of self-perceived health status.

### *Complementary/Alternative Methods of Health*

With the increase in the Latino population, there has been a demand for research on *Complementary/Alternative Methods of Health* use by minority populations and most importantly by specific minority subgroups (NCCAM, May 2002). Complementary and alternative medicine (CAM) use among the Hispanic/Latino population is poorly understood. Complementary/alternative medicine is known by a variety of terms, such as complementary, holistic, integrative, unorthodox, and natural medicine. Some types of alternative medicine include acupuncture, aromatherapy, chiropractic, folk medicine, homeopathy, and herbal medicine. A treatment is called “alternative” when it is used instead of conventional treatment. A “conventional” treatment is one that is widely accepted and practiced by the mainstream medical community. If alternative treatments are used in addition to conventional treatments, they are referred to as “complementary therapies” (Cohen, Cerone, & Ruggiero, 2002). Currently, the National Center for Complementary and Alternative Medicine (NCCAM) a division of the National Institutes of Health (NIH), is dedicated to exploring complementary and alternative healing practices in the context of rigorous science, training CAM researchers, and disseminating authoritative information to the public and professionals.



A large number of people use complementary and alternative medicine in the United States. Recent data from the National Center for Health Statistics reports of the 27 types<sup>7</sup> of CAM studied, prayer for health reasons was the most frequently used. Women were more likely than men to use CAM, including prayer for health reasons, natural products such as herbs or herbal medicine and deep breathing exercises (Barnes, Powell-Griner, McFann, & Nahin, 2004). Americans spend \$27 billion out of pocket every year on complementary and alternative medicine (Eisenberg, et al., 1999). Nearly all CAM users see physicians for health care, (Astin, 1998), but few mention their use of CAM to their doctors (Drivdahl and Miser, 1998). Among the Latino population a common hierarchy of seeking relief from lay healers begins with home remedies or seeking assistance from relatives or neighbors (especially female). A common home remedy is a tea made from various herbs, spices, or fruits; and prepared in a specific and prescribed manner (Zapata & Shippee-Rice, 1999).

Keegan (1996), reported that many low-income Latinos use folk practitioners such as the *curandero* (lay healer who intervenes in multiple dimensions, e.g., physical and spiritual), the *yerbero* (herbalist), the *sobador* (masseur), or practices such as spiritual healing rather than treatments offered by health clubs or health food stores (Keegan, 1996; Burge and Albright, 2002).

Research regarding curandero use has been conflicting. In most cases, it is only after home remedies prove ineffective that help is sought from a *curandero*

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<sup>7</sup> Includes acupuncture; ayurveda; homeopathic treatment; naturopathy; chelation therapy; folk medicine; nonvitamin; nonmineral, and natural products; diet based therapies (six subgroups); megavitamin therapy; chiropractic care; massage; biofeedback; meditation; guided imagery; progressive relaxation; deep-breathing exercises; hypnosis; yoga; tai chi; qi gong; prayer for health reasons; and energy healing therapy/Reiki. Respondents might have reported using more than one type of therapy.

(Neff, 1998). *Curanderos* are not used or are not reported as used as much in the U.S. as in countries of origin (Neff, 1998; Zapata & Shippee-Rice, 1999). These studies speculate that *Curandero* use may be diminished because of increased access to care or the more cosmopolitan nature of those living in the U.S.; or under-reported because of fear of misunderstanding or prosecution (of the *curandero*). Regardless of the source of CAM utilized by the Latino community, the patient (and family) is likely to include faith in God as a vital component of understanding of the problem and the cure of illness (Zapata & Shippee-Rice, 1999). Excluding prayer, data from the 2002 National Health Interview Survey found Hispanics and African Americans used CAM less frequently (27% and 26% respectively) than non-Hispanic whites (36%) (Graham et al., 2005).

Burge and Albright's (2002) study of CAM use included 575 respondents, most were Latino (80%), women (74%), high school graduates (69%), and married (57%). They found the most popular remedy was tea, especially *Manzanilla* (chamomile). Only 12 (2%) reported use of popular health store products such as St. John's wort, aloe vera, and *Ginkgo biloba*. Home remedies included soups, warm milk, lemon juice, garlic, honey, vinegar, baking soda, and onion in various combinations. Respondents also used prescriptions (62%) and over-the-counter medicines (77%) for their health problems. Older people used more prescription medicines while younger people used more over-the-counter medicines.

Given the dearth of data among Central and South Americans and their health needs and health status as well as patterns of CAM use in minority populations being poorly understood (Graham, et al., 2005) this dissertation study will be an important

contribution to advancing knowledge about CAM use and self-perceived health status among Central and South Americans in Montgomery County, Maryland by gender. Additionally, an improved understanding of CAM use among this specific population will enable clinicians to provide more culturally sensitive care to the full range of their culturally diverse population. Given recent data from NHIS that highlights Hispanic having the highest provider non-disclosure rates, understanding the barriers that Central and South Americans face regarding non-disclosure of CAM use to their healthcare providers is necessary.

### *Self-Perceived Health Status*

As an outcome variable, self-report of health status, provides an easily measured indicator of physical, emotional, and social aspects of health and well-being. Measuring health by self-report of participants in research studies, is a method widely used by researchers. Self-report is based on perceived health, or what individuals believe, based on their level of true health. For the purpose of this dissertation, the terminology of self-perceived is used rather than self-report. These terms are used interchangeably in the research literature.

Self-perceived health is often accomplished through a single item, such as, “how would you rate your health? Excellent, very good, good, fair, poor.” This method has the advantage of permitting assessment of those aspects of health that is only known by the individual. Conversely, it does not reflect those aspects of health that may be asymptomatic, such as high blood pressure (Ward, 2007). Self-perceived health status is not useful for planning services or describing prevalence of disease,

but it can easily be used to study relationships with other variables of interest as in the case of this study.

### *Chapter Summary*

The primary objective of this study is to examine selected health care factors that are associated with self-perceived health status among Central and South Americans in Montgomery County, Maryland by gender. Limited data exist on the health of Central and South American men and women. Studies that have examined Latino health indicators have generally excluded Central and South Americans or have grouped them together under “other Hispanic”.

The literature demonstrates that health disparities are highly associated with SEP, immigration status that is, undocumented status, lack of health insurance coverage, depression, perceived discrimination and health literacy. These factors in combination with reported chronic conditions are highly associated with self-perceived health status. In this study, the applicability of these findings is explored with the Central and South American population.

Given the heterogeneity, coupled with increased immigration and limited research among Central and South Americans and Latino women, understanding the selected health care factors that are associated with self-perceived health status provide the compelling and challenging imperative for this descriptive cross-sectional study.

## **Chapter Three: Methods**

This study is cross-sectional using survey data collected on 132 Central and South American residents in Montgomery County, Maryland. This study examines selected health care factors that are associated with self-perceived health status among Central and South Americans.

A mix of methodologies characteristic of research projects in Women's Studies are used since the questions posed cannot be sufficiently addressed by single-discipline approaches to research. Many researchers recognize that the present situation of quantitative or qualitative methodology is neither complete nor satisfactory (Oakley, 2000). Feminist research includes a multitude of methods for investigation, each of which can uniquely influence the social change effort to improve the lives of women and attain greater gender equity (Miner-Rubin, et al., 2007). Official statistics, survey data and longitudinal studies are all rich sources of information. This study includes statistical analyses of survey data, recoding of open-ended responses into broader health-related categories, and comparative analyses of survey data (demographic, health status, health access, and other health indicators) with national and state trend data to assess differences across Latino subgroups by gender.

The methodological approach in this study is responsive to several theoretical and methodological limitations that have been identified in past literature. Researchers have emphasized the heterogeneity of the Latino population and the importance of disaggregating Latinos by national origin and region of residence. In the state of Maryland, Latinos are the fastest growing racial/ethnic minority group

(MD Department of Planning PDS, 2003). The majority of the Latino population has immigrated from Central and South America. They represent a distinct subpopulation of Latinos; the majority of whom arrived in the last 20 years. This is in contrast to historically under-represented populations of Mexican and Puerto Rican descent as well as Cuban Americans who hold a special status in the United States. Central and South Americans have unique lived experiences that are associated with their health status and are an under-studied population.

The second methodological limitation that this approach responds to is the oftentimes exclusion of community members from participation in the research design, questionnaire development and execution of study. In this study, a community-based participatory approach was used. Creating community partnerships such that community representatives participate in the definition of the research problem, interpretation of the data, and application of the findings may help address these concerns. Community-based participatory research (CBPR) is a framework researchers can apply to their studies to gain a better understanding of the social context in which disease outcomes occur, while involving community partners in the research process, and insuring that action is part of the research process itself (Leung, Yen & Minkler, 2004). The Latino Health Initiative (LHI), established in July 2000, states as its mission "to improve the quality of life of Latinos living in Montgomery County, Maryland, by developing and implementing an integrated, coordinated, culturally and linguistically competent system that supports, values, and respects Latino families and communities." Olivia Carter-Pokras, who led the initial research project, LHI staff and community members were an integral part of the research team

that developed the research instrument and conducted the interviews at a health fair in a community setting within Montgomery County, Maryland.

### *Description of Setting*

Montgomery County, Maryland is situated just north of Washington D.C. and Southwest of Baltimore. It is one of the most affluent counties in the nation and has the highest percentage (29.2%) of residents that hold an advanced degree (US Census Bureau, 2003). Montgomery County is a major migration destination for those from other states and immigrants from abroad. Several cities were reported as respondent's city of residence within Montgomery County. Given the importance of this dissertation's methodology of community-based research and interventions, a description of demographic data of the communities and knowledge of available health care resources would have strengthened the study by providing a context for interpretation of data within these Latino communities. However, this was not possible since missing data on town of residence had high rates of missing information.

New residents are characterized as young married couples in their thirties with children. The population is predominately non-Hispanic white (52.6%), although Asians (15.6%) and Hispanics (13.8%) comprise a higher percentage than the County norm. Almost half (44.5%) of the new residents are more likely to speak a language other than English (US Census Bureau, 2003).

As the fastest growing racial/ethnic minority group, Maryland's Latino population differs from that of the entire United States in that the vast majority is recent immigrants. According to the Washington Post, Montgomery County has the

largest South and Central American community in the Baltimore-Washington metropolitan area (August 15, 2006). Analysis of net international migration<sup>8</sup> data compiled since 2000 shows that immigration from abroad is a major contributor to the county's growth.

Montgomery County has the largest Hispanic and Asian populations in the state; almost half of Maryland's Hispanic and Asian populations live in Montgomery County. The annual growth rate since 1997 for Latinos is 7.8%, which makes them the fastest growing minority group in the county. The growth rate for Asians (3.7%) and African Americans (3.1%) is much less (Washington Council, 2003). According to the 2006 American Community Survey (2006), Montgomery County has the eight highest household median incomes in the United States with 3 out of every 8 households reporting annual incomes over \$100,000. Despite the prosperous and affluent status of the county, examinations of income by racial and ethnic groups reveal disparity not only in the median household incomes but also in income growth. While non-Hispanic white and Asian householders, already with the highest median incomes, enjoyed 4% income growth between 1996 and 2002, households headed by Blacks or Latinos experienced a 4 and 6 percent drop, respectively, in the median household income (US Census Bureau, 2003). The following table shows trends of Montgomery County household income.

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<sup>8</sup> International migration includes net foreign-born international migration, net movement to/from Puerto Rico, net Armed Forces relocation, and native immigration.



**Table 3.1***Median Household Income by Race & Ethnicity*

Race & Ethnicity	1986	1996	2002
White	\$79,057	\$81,070	\$84,501
Black	\$56,386	\$57,422	\$55,287
Asian/PI	\$67,378	\$74,759	\$78,180
Latino	\$66,414	\$53,902	\$50,790
County	\$75,742	\$75,277	\$79,115

*Sample*

Participants were recruited in October of 2005, at LHI's health fair in Montgomery County. Community clinics and hospitals provided health education, music, and free health screening tests to over 1,000 Latinos. Trained bilingual interviewers elicited responses from voluntary participants.

**Items Used for Inclusion Criteria for Selection of Sample**

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1. What language do you prefer to speak?  
☐ English  
☐ Spanish
  2. How old were you on your last birthday?
  3. What county do you live in?  
  
☐ Montgomery County  
☐ Other
  4. Which city do you live in?  
☐ Wheaton  
☐ Silver Spring  
☐ Other (Specify)
  5. Are you Hispanic/Latino (a) or of Latin American Origin?  
☐ Yes  
☐ No
- 

The screener assessed language of preference and was the first item utilized in the screening criteria for participation. If a participant did not speak either English or Spanish, the interview was discontinued. Participants needed to be 18 years of age or older, reside in Montgomery County and identify as Hispanic/Latino or of Latin American origin to be included in the survey. After screening, 132 participants were eligible for the study, 69.2% female and 30.8% male with a mean age of 43.4 years.

*Questionnaire Development*

Items for this survey were drawn from several different questionnaires. The 51-item survey instrument was compiled by using items from the Behavioral Risk Factor Surveillance System (BRFSS), the National Day Labor Survey, the Commonwealth Fund 2001 Health Care Quality Survey, and questions developed in

collaboration with the Latino Health Initiative. The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. BRFSS provides state-specific information about a variety of health issues such as asthma, diabetes, health care access, alcohol use, hypertension, obesity, cancer screening, nutrition and physical activity, tobacco use, and more. Federal, state, and local health officials and researchers use this information to track health risks, identify emerging problems, prevent disease, and improve treatment.

The National Day Labor Survey (NDLS) is the first nationwide study on day laborers. The NDLS was developed by Abel Valenzuela Jr. of the University of California, Los Angeles. The instrument was used with 2,660 workers at 264 hiring sites in 20 states and the District of Columbia. Researchers found that day laborers earned a median of \$10 an hour and \$700 per month, and only a small number earned more than \$15,000 a year (Valenzuela, 2006). Researchers who conducted the study said the most surprising finding was the pervasiveness of wage violations and dangerous conditions that day laborers faced. Items relating to employment and labor on this survey instrument are especially crucial for this population's access to material and social resources as correlates of access to health care and self-perceived health status. The Commonwealth Fund 2001 Health Care Quality Survey is a nationwide random-digit-dial survey of 6722 adults, conducted between April 30 and November 5, 2001.

The final LHI instrument was assessed for content validity by the data work group of the Latino Health Initiative and piloted for use among other Latino communities.

#### *Study Questions and Measurements*

In this study, self-perceived health status is the dependent variable. The following research questions guide the cross-sectional analysis.

1. Are there differences by gender on Health Access, English Language Proficiency, Literacy Levels, Health Behaviors, Perceived Discrimination and Depression?
2. Are there major differences in reported number of Chronic Conditions, Sources of Health Information and Complementary/Alternative Medicine used by gender?
3. What factors are most likely to predict Self-Perceived Health Status?
4. What Complementary and Alternative Medicines are Central and South Americans most likely to use by gender?
5. What sociodemographic factors distinguish Central and South Americans from other Latinos subgroups?

Table 3.2 shows the variables utilized in the data analysis. Fifteen (15) Items from the 51-item survey were selected as sociodemographic indicators. Six indices were created to measure: Health Access, English Language Proficiency, Literacy Levels, Health Behaviors, Perceived Discrimination, Depression and three self-report measures on number of Chronic Conditions, Sources of Health Information, and Reported use of CAM.

**Table 3.2***Research Question Study Variables*

Concept	Variables	Measure/Items	Data Source
Sociodemographic			
	Gender	1 Item	Q. 03
	Education Level	1 Item	Q. 25
	Age	1 Item	S. 2
	Marital Status	1 Item	Q.24
Labor Status			
	Employment	1 Item	Q. 26
	Hours of Work	1 Item	Q.29
Income	Annual Income	1 Item	Q. 34
Household			
	# in Household	1 Item	Q.36
	Food Insufficiency	1 Item	Q.41
National Origin			
	Country of Birth	1 Item	S.4.1
	Arrival in US	1 Item	Q.47
	Language of Preference	1 Item	S.1
Health Care Access Indicators			
	Visit in US	1 Item	Q.11
	Length of Time Since Last Visit	1 Item	Q.9
	Place of Visit	1 Item	Q.12
Health Access		2 Items	Q. 30, 14
Discrimination		6 Items	Q. 13, 32, 33
English Language Proficiency		4 Items	Q. 44-45
Depression		2 Items	Q. 22
Health Behaviors		3 Items	Q. 18-20
Literacy Level		5 Items	Q. 44-47
Reported # of Chronic Conditions		6 Items	Q. 2
Reported Sources of Health Information		8 Items	Q. 51
Reported CAM Practices Used		6 Items	Q. 16

## *Conceptual and Operational Definitions of the Measures*

### *Dependent Variable*

*Self-perceived health status* (SPHS) is measured using a single question.

SPHS is designed as a generic indicator of health status for use in population surveys and calculated to be applicable to a wide range of types and severity's of conditions (Ware & Sherbourne, 1992). Developed to measure a respondent's personal judgment of perceptions of health, the core description of the reliability and validity of this measurement are exemplary (McHorney, Ware, Lu, et al., 1994). Self-perceived health status by respondents has generally proven to be sound indicators of later life health and mortality and is generally accepted by researchers as a valid measure of health status (Phillips, Hammock, & Blanton, 2005). In addition, it tends to be a good measure of overall health that correlates well with other assessments of patient health. This is true across racial/ethnic sub-populations, with some exceptions among some newer Latino immigrants, possibly due to the immigrant epidemiological paradox or the influence of the generally optimistic outlook of new residents on their health (Lopez, 2004). Respondents were asked: "In general, would you say that your health is: 1) Excellent, 2) Very Good, 3) Good, 4) Fair, and 5) Poor"--to operationalize the concept of self-perceived health status. On the basis of this item, the dependent variable was re-coded into a binary with self-reported fair or poor general health =0 as opposed to good, very good, or excellent health =1.

### *Independent Variables*

The survey included demographic questions on gender, age, and marital status. Interviewer ascertained *Gender*. *Age* and *Marital Status* were self-reported and

these categorical data were summarized using frequency tables. *Education Level* as an important predictor variable was re-coded from 8 response categories to 5 for a descriptive summary and then coded into a binary of < High School Graduate=0 and > College/Masters/Doctorate=1 for the logistic regression analyses.

*Labor Status* was measured utilizing 2 items asking whether the respondent was employed or unemployed and hours worked per week. Weekly household income (1 item) was recalculated into annual income and reported by frequency and percent. The survey also assessed *Household* characteristics. One item asked the respondent the *number of people* living in the household, including the participant. The second item that corresponds to characteristics in the household is *Food Insufficiency*. Food insufficiency is the term used to describe reduced food quantity or skipped meals for adults and children (Radimer, Olson & Campbell, 1990). The item was operationalized using the question: “In the last 12 months, did you or other adults in your household cut the size of your meals or skip meals because there wasn’t enough money for food?” This item is widely accepted as a valid measure of food insufficiency (Rose, 1999). A dummy variable was coded 1=No and 0=Yes.

*Country of Birth* and *Time in U.S.* are variables indicating where the participant was born, and the length of time they have been in the United States. *Country of Birth* was an open-ended response option operationalized by “In what country were you born?” Response categories were collapsed into Central America (México, Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua). South America responses included (Bolivia, Chile, Colombia, Ecuador, Peru, and Brazil). A very small number reported US/Caribbean countries of birth. These included



(Dominican Republic, Puerto Rico and the United States). These open-ended responses were summarized by frequencies. *Arrival in United States* was collapsed into a binary of “More than 10 years ago”=1 and “Less than 10 years ago”=0.

The last set of indicators measured *Health Care Access Indicators* included 3 items to measure the participant’s utilization of health services. *Last Visit* to health care professional was assessed by Yes=0 and No=1 to “Was this last visit to the doctor or health care professional in the United States?” *Length of time* for last visit was collapsed into 3 response categories. Less than 1 year was coded as 0, 1-3 years=1, and more than 3 years since last visit to health care professional was coded as 2. The last item, *place of visit*, were open-ended responses and operationalized as “What kind of place did you go to when you last saw a doctor?” These descriptive data for health care indicators are reported as frequencies.

#### *Composite Measures of Variables*

Composite measures are frequently used in quantitative research. Indexes are efficient devices for data analysis because they allow summary of several indicators in a single numerical score while maintaining the specific details of all individual indicators (Babbie, 2005). In order to ascertain the first research question of this study, “Are there differences by gender on Health Access, English Language Proficiency, Literacy Levels, Health Behaviors, Perceived Discrimination and Depression?” Indexes were constructed by accumulating scores assigned to individual attributes.

The first index is *Health Access*. For insurance status, one item was asked using a dichotomized yes/no response option. Delay of care is yes/no response

options with a follow-up open-ended question regarding the participant's main reasoning for delay of care. These two items were combined with a Yes=0 and No=1. Range of scores is (0-2) with a higher score reflecting lack of insurance and delay of care. Important variables, which may be associated with self-perceived health status, include items on *Perceived Discrimination* based on gender, race/ethnicity, class, and the ability to speak English. Six dichotomized (yes/no) options where No=0 and Yes=1 were coded (range 0-6). Higher scores indicate higher perceived discrimination.

Other indexes include *English Language Proficiency (ELP)* and language in which the interview was conducted. Four items were used with response options coded Well=2, Get By/ A Little=1, and none=0. Scores ranged from 0-8 with lower scores indicating more limited English Proficiency. *Depression* items were drawn from the Patient Health Questionnaire-2 (PHQ-2). This questionnaire is used as the initial screening test for major depressive episode (Kroenke, Spitzer & Williams, 2003). The items were: 1) "little interest in pleasure or doing things," and 2) "feeling down, depressed or hopeless." Each item refers to the frequency of symptoms during the past two weeks. A response scale of not at all (0) =0, several days (1-6) =1, more than half the days (7-10)=2, and nearly every day (11-14)=3 was used. Scores ranged from 0-6 with higher scores reflecting higher levels of depression.

The lack of well-specified research on individual Latino subgroups (Mexican, Cuban, Central and South Americans) has resulted in inadequate data on *health behaviors* for these individual populations (Ramirez & Suarez, 2001). Weight, height, sleep patterns, tobacco and alcohol use are important mediators of the relationship

between ethnicity and self-perceived health status. In this study, two health behaviors were included: amount and frequency of use of tobacco and alcohol scores. Two items with response options of 0-1 days per week =0 and 3 or more days per week=1 for alcohol use and 1 item with a yes=1 and No=0 option to smoking cigarettes was used. A higher score (range=0-3) indicated more use of alcohol and tobacco. The *Literacy Level* index is composed of five items. The five items drawn from this index measure reading and writing; one item is “How easy or difficult is it for you to read and understand the instructions on a prescription bottle about how to use this medicine?” Response options include Very/Somewhat Easy=2, Somewhat Difficult=1, and Very Difficult=0. Four items with response options of Well=2, Get By/A Little=1, and none=0 reflect the participants literacy levels of being able to read and write. Range of scores was 0=10 with a lower score reflecting lower levels of literacy.

#### *Numerical Count Analysis*

A numerical score of number of Reported *Chronic Conditions, Sources of Health Information* and *Complementary/Alternative Medicine* are analyzed by gender. Six items on *chronic conditions* are included: diabetes, hypertension, high cholesterol, asthma, cancer, and arthritis. Respondents were asked to indicate whether or not (Yes=1 and No=0) they have ever had the specified conditions. Scores ranged from 0-6 with higher scores indicating higher number of chronic conditions. An open-ended response is included for the category of “other health problem.”

*Sources of Health Information* is measured with eight response options. These responses included Radio/TV/Newspaper/Magazine/Health Fair/Friend or

Family/Clinic/and Health Promoter. An open-ended option was left for any “other” responses. Two items are used to measure CAM. Respondents were asked if any of the following factors were used to take care of their health: Spiritual Doctor/*Curandero*, Prayer, Herbal Medicine, Chiropractic Therapy, over-the-counter (OTC) medications, vitamins, and medicines from their home country. Open-ended responses were then used to probe what remedies might be used for stomachache, fever and headache.

### *Qualitative Analysis*

For the three of the selected variables: Chronic Conditions, Sources of Health Information, and CAM use, a response option of other was included since limited information is available on this subgroup. Qualitative content analyses were conducted for “all other” and open-ended response options in order to address research question number four. Each response was categorized and collapsed into specific chronic conditions such as “allergies”, and other sources of health information such as “church”. For CAM use, in addition to survey check-off items, three open-ended questions were asked regarding what remedy would individual take for a headache, fever and stomachache. These open-ended responses were collapsed into four broad categories such as home remedies e.g. teas, over-the counter medications, seeks health care and other. The data are presented in tables in rank order of frequency.

### *Comparative Analyses with National Data Sets*

Research question number five is answered through the review of national data sets for comparison with the study data. An examination of large nationally

representative data sets was explored to better understand and compare relationships between the sociodemographic and access factors in this study with total Latino, non-Hispanic White, Mexican-American, and other Central and South American populations. Only those variables for which there is available data in both this study data set and national data sets were used.

#### *Survey Data Analyses Procedures*

SPSS (Statistical Package for the Social Sciences) is a data management and analysis product produced by SPSS, Inc. in Chicago, Illinois. Among its features are modules for statistical data analysis, including descriptive statistics such as plots, frequencies, charts, and lists, as well as sophisticated inferential and multivariate statistical procedures like analysis of variance (ANOVA), factor analysis, cluster analysis, and categorical data analysis. SPSS is particularly well-suited to survey research, though by no means is it limited to just this topic of exploration ([www.spss.com](http://www.spss.com)). All analyses were performed with SPSS 13.0 and differences are noted at the level of significance of 0.05 due to the descriptive nature of study and small sample size.

The data was reviewed for errors, missing data and outliers. Secondary to an initial preview of frequency distributions for all variables in the study a plan of analysis were developed to reflect the variables under study for analysis of the research questions. These variables were re-coded and inputted into the computer file. Most variables had a relatively small amount of missing data. Several variables had missing data due to the way the survey was coded.

Descriptive data analysis was carried out using frequency distributions and cross tabulations for the 15 social and demographic indicators by gender and are reported in Chapter 4, Table 4.1. Univariate analysis was also conducted for each measure in the six indexes and reported as frequency distributions.

To test the differences by gender on the six indexes and the three numerical counts (Research Questions 1 & 2) Multivariate Analysis of Variance (MANOVA) was conducted. As a statistical method of analysis MANOVA is a powerful statistical tool which provides information on the nature and predictive power of the independent measures, as well as the relationships and differences seen in the dependent measures. This method is used for assessing group differences across multiple dependent variables simultaneously, based on a set of categorical variables, and is especially suited for this study (Babbie, 2005). MANOVA produces an overall significance test for differences between groups. Because MANOVA effectively uses a single variable (for example in this study, gender) it protects against type 1 errors<sup>9</sup> arising by chance from performing multiple tests.

In order to explore what factors are most likely to predict Self-Perceived Health Status binary logistic regression analysis was conducted. This statistical method was used to assess the impact of Health Access, English and Literacy Proficiency, Health Behaviors, Discrimination, Depression, Number of Chronic Conditions, Gender, and Education level (predictor variables) on the dependent variable, Self-Perceived Health Status. Results of the analysis are found in Chapter 4.

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<sup>9</sup> Type I error, also known as an "error of the first kind", an  $\alpha$  error, or a "false positive": the error of rejecting a null hypothesis when it is actually true.

### *Limitations of Data*

Several limitations are inherent in this study. The use of a convenience sample means that the results may not generalize to Latinos beyond this study. Further, this research uses a cross-sectional design, which measures a person's health factors at one moment in time. Thus, the health information may under-estimate or over-estimate their health and may not accurately reflect their actual sense of overall physical well being. Another limitation of the survey instrument includes a binary variable of male/female as defining only two categories of gender and gender identity. Thus this measurement was narrowly defined although it is recognized that gender as an analytic category is fluid and constitutes a continuum of gender identity. Non-heterosexual males, females, and transgendered persons were therefore not identified.

Further limitations include a relatively small sample, which was limited to the respondents of a health fair who were asked to volunteer to participate in the survey. Among those who agreed to participate respondents were asked to base their responses on personal knowledge. Since all data in the survey were obtained by self-report, data are subject to recall and may be under-reported, over-reported, or subject to self-report bias. Further, the respondents may not have accurately recalled diagnoses of chronic conditions and medical record data is not available to validate diagnoses. Current research also shows responses to survey questions may be likely influenced by the respondents' perceptions of wanting to be an active participant in their "health" at such an arena, like a "health" fair.

Limitations also include the questions asked by the survey instrument. For example, we expect given the high percentage of no insurance in this sample

undiagnosed health conditions may be present in this population. For future research, important items that would have been beneficial to this study include immigration status, psychosocial factors such as stressors, and current functional limitations (both physical and mental), all of which are associated with self-perceived health status. Lastly, the participants represent a very specific group of the Latino community and therefore lack of generalizability to other subgroups such as Mexicans or Puerto Ricans is another limitation of this study.



## Chapter Four: Results and Discussion

This study describes and examines the selected health care factors that are associated with self-perceived health status among Central and South Americans. This chapter presents the findings of the study for each of the five research questions and discusses the results in relation to empirical literature. The five research questions that guided this study are:

1. Are there differences by gender on health access, English language proficiency, literacy levels, health behaviors, perceived discrimination and depression?
2. Are there major differences in reported number of chronic conditions, sources of health information and complementary/alternative medicine used by gender?
3. What factors are most likely to predict self-perceived health status by gender?
4. What Complementary and Alternative Medicines are Central and South Americans most likely to use by gender?
5. What sociodemographic factors distinguish Central and South Americans from other Latinos subgroups?

### *Sociodemographic Characteristics of Study Sample by Gender*

Table 4.1 presents the sociodemographic characteristics of respondents for total population and by gender. A total of 132 Latino respondents participated in the survey. Missing data on gender for 2 respondents was found and subsequently dropped from any analysis involving gender. Age of participants ranged from 18 to 75 years with a mean age of 43.4 years. More than 75% of the study population were

female (69.2% n=90) and 30.8% were male (n=40). Participants were asked their country of birth. Over 14 countries in Central and South America, as well as the US/Caribbean were reported. Half of the study population identified their country of birth in Central America (48.4%) and half in South America (42.6%) with 9% identifying themselves as US/Caribbean.

Education level showed variability by gender. A larger percentage of males (22.5%) compared to females (16.7%) either never attended or attended grades 1-8 only, however less females (13.3%) than males (22.5%) had graduated college or pursued higher education. One quarter of the total study population was single, 23.3% of females and 22.5% of males with a higher percentage of females (15.6% vs. 2.5%) reporting their status as divorced, widowed or separated.

Over one-third of the females (34.4%) compared to only 5% of males report being unemployed or not in the labor force which was substantially higher than the percentage of men. Of the females employed, approximately one-third earned between \$100 and \$300 per week. By contrast, only one fifth of males earned that much. The number of participants earning between \$500 and \$1,000 dollars per week was similar for males and females. Approximately 60% of males and females report living in the household with an average of 2-4 people. A larger percentage of males than females arrived to live in the United States less than 10 years ago. A strong majority of females and males preferred to speak Spanish. Studies that have examined the relationship between language and health care have found that, compared with English-speaking Hispanics, Spanish speakers are less likely to use healthcare services and to have a usual source of health care (Zambrana & Logie,

2000; Solis, Marks, & Garcia, 1990; Schur & Albers, 1996; Kirkman-Liff & Mondragon, 1991; Weinick & Krauss, 2000).

TABLE 4.1

*Sociodemographic Characteristics of Study Sample by Gender*

<b>Variable</b>	<b>Total n (%)</b>	<b>Female n (%)</b>	<b>Male n (%)</b>
<b>Age</b>			
18-44 years	80 (60.6)	50 (55.6)	30 (72.5)
45-64 years	44 (33.3)	34 (37.8)	9 (22.5)
Over 65 years	8 (6.1)	6 (6.7)	2 (5.0)
<b>Country of Birth</b>			
Central America	59 (48.4)	45 (55.6)	14 (35.9)
South America	52 (42.6)	32 (39.5)	18 (46.2)
US/Caribbean	11 (9.0)	4 (4.9)	7 (17.9)
<b>Education Level</b>			
Never Attended/ Grades 1-8	24 (18.2)	15 (16.7)	9 (22.5)
Grades 9-11	21 (15.9)	16 (17.8)	5 (12.5)
High School Graduate	39 (29.5)	29 (32.2)	9 (22.5)
1-3 Years of College	26 (19.7)	18 (20.0)	8 (20.0)
College	22 (16.7)	12 (13.3)	9 (22.5)
Graduate/Masters/Doctorate			
<b>Marital Status</b>			
Single	31 (23.5)	21 (23.3)	9 (22.5)
Married/Co-habiting	85 (64.4)	55 (61.1)	29 (72.5)
Divorced/Widowed or Separated	15 (11.4)	14 (15.6)	1 (2.5)
<b>Employment Status</b>			
Unemployed	9 (6.8)	8 (8.9)	1 (2.5)
Not in Labor Force	24 (18.2)	23 (25.6)	1 (2.5)
Employed	99 (75.0)	59 (65.6)	38 (95.0)
<b>Annual Household Income</b>			
< \$5,200 per year	15 (11.5)	12 (13.3)	3 (7.7)
\$5,201-\$15,600 per year	36 (27.5)	27 (30.0)	8 (20.5)
\$15,601-\$26,000 per year	58 (44.3)	34 (37.8)	23 (59.0)
\$26,001-\$52,000 per year	22 (16.8)	17 (18.9)	5 (12.8)
<b>People Living in Household</b>			
1	28 (21.5)	20 (22.7)	8 (20.0)
2-4	79 (60.8)	53 (60.2)	25 (62.5)
5 or more	23 (17.7)	15 (17.0)	7 (17.5)
<b>Arrival in US</b>			
< Than 10 years	68 (55.3)	42 (47.7)	25 (75.8)
> Than 10 years	55 (44.7)	46 (53.3)	8 (24.2)
<b>Preference of Language</b>			
English	6 (4.5)	3 (3.3)	3 (7.5)
Spanish	125 (94.7)	86 (95.6)	37 (92.5)

Table 4.2 shows descriptive statistics for index scores by gender. There were 121 respondents with valid scores on all variables. Two items from the 6 item *Perceived Discrimination* index: “Does your employer allow you to take time off at work to get health care for yourself or other family members?”, and “Do you get paid for the time you need off from work to get health care for yourself or other family members?” were not included in the Perceived Discrimination index due to large numbers of missing data, (n=23 and n=66, respectively). The Perceived Discrimination items were based on four dichotomized (yes/no) responses for gender, race/ethnicity, insurance status, and the ability to speak English.

**Table 4.2**  
***Mean and (SD) for Index Scores by Gender***

		Mean	Std. Deviation	N
Health Access	<b>Gender</b>			
	Male	1.11	0.67	38
	Female	1.08	0.68	83
	Total	1.09	0.67	121
English & Literary Proficiency	Male	4.15	2.87	38
	Female	4.20	2.56	83
	Total	4.19	2.65	121
Health Behavior Index	Male	0.42	0.52	38
	Female	0.11	0.30	83
	Total	0.21	0.41	121
Discrimination	Male	0.38	0.71	38
	Female	0.39	0.76	83
	Total	0.39	0.74	121
Depression	Male	0.94	1.37	38
	Female	1.30	1.79	83
	Total	1.19	1.67	121

Table 4.2 shows small differences by gender on health access, English & literacy proficiency, discrimination and depression. There was a significant difference

on the health behavior index. The health behavior index was substantially higher for men than women. Overall, the majority of the respondents (89.4%) of both men and women reported never smoking cigarettes, though men had a tendency to smoke 'most days'. Seventy-four percent of the total sample reported no alcohol use within the last 30 days. Multivariate Analysis of Variance (MANOVA) was the method of data analysis utilized to test the differences by gender on Health Access, English Language Proficiency, Literacy Levels, Health Behaviors, Perceived Discrimination and Depression. The multivariate test of significance for the index scores by gender implies that there was a significant overall difference by gender (Wilks' Lambda value= .862). This is consistent with the research that shows Lung cancer deaths are about three times higher for Hispanic men (23.1 per 100,000) than for Hispanic women (7.7 per 100,000), and the overall increase in the prevalence of alcohol use among Hispanic men.

Interestingly, declines in the prevalence of smoking have been greater among Hispanic men with at least a high school education than among those with less education.

Table 4.3 shows the individual tests by gender on health access, English language and literacy proficiency, health behaviors, perceived discrimination and depression. There was a significant gender difference on the health behavior index. All other univariate tests by gender were nonsignificant.

Table 4.3

*Univariate Tests for Index Scores by Gender*

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Gender	Health Access	.030	1	.030	.065	.799
	English & Literacy Proficiency	.057	1	.057	.008	.928
	Health Behavior	2.450	1	2.450	16.266	.000
	Discrimination	.007	1	.007	.012	.913
	Depression	3.263	1	3.263	1.158	.284

These data partially confirm differences by gender. In response to research question one: “Are there differences by gender on health access, English and literacy proficiency, health behaviors, perceived discrimination and depression?” the univariate F test showed significant differences for the health behavior index, and, though not statistically significant, gender differences were observed in the depression index.

On the depression index (limited sample size) women were more likely than men to respond ‘nearly every day’ on the two items (little interest or pleasure in things) 7% versus 1.5%, and (feeling down, depresses or hopeless) 8% versus 0.8% of women and men respectively. These findings are similar to the findings reported in



other studies among immigrants; Hispanic adults were more likely to experience serious psychological distress (3.6%) than white (2.9%), black (1.9%), and Asian adults (1.7%) (Dey and Lucas, 2006; Kessler, Andrews, Colpe, et al., 2002). For women, the higher rates of marital instability and low educational levels are important risk factors for depression (Vega and Alegría, 2001). Interestingly, in terms of marital status, all of the participants who were separated were women. All respondents with ‘advanced professional or doctoral degree’ were men while all who ‘never attended school’ were women.

There were no differences by gender in the perceived discrimination index. It should be noted that women were more likely to perceive unfair treatment based on their insurance status and the ability to speak English.

Perceived sense of discrimination (fear) and lack of community resources and services may be two factors that negatively affect the psychological status of this community. This study reported women were more likely than men to respond ‘nearly every day’ on the two items (little interest or pleasure in things) 7% versus 1.5%, and (feeling down, depresses or hopeless) 8% versus 0.8% of women and men respectively. These data together with ‘ability to speak English’ may suggest low English language proficiency as a primary reason Latinos may underutilize mental health care services (Zambrana, Ell, Dorrington, et al., 1994). Similarly, in assessing the role of discrimination, depression and language proficiency as a deterrent to access to health care, these and other factors may contribute to the Latino community being viewed as a subordinate group by public health systems (Zambrana, 2001).

These data like other studies show a perception of discrimination by Latino women as based on insurance status and limited English ability (Commonwealth, 2001). These findings appear counterintuitive to other studies that have shown racism and gender discrimination endemic to Latinos lack of use of health care services (Krieger, 1990; Schulz, et al., 2006). Several reasons may account for these findings. Since these respondents are foreign-born, young and relatively healthy, it may be that they do not need to use health services on a regular basis and thus have not experienced discrimination. Secondly, they may use community-based health care services that may have predominantly Latino and/or Spanish-speaking providers and thus perceive they are not discriminated against. On the other hand, there may be a social desirability response effect since these surveys were conducted at a health fair with bilingual interviewers.

English language and literacy proficiency showed no statistically significant differences by gender with 92% of men and 95% of women choosing Spanish as their language of preference. Nineteen percent of the total respondents reported they could speak no English and only 31% reported “very difficult to somewhat difficult” in reading and understanding the instructions on a prescription bottle. Adults with limited health literacy, as measured by reading and writing skills, have less knowledge of disease management and of health-promoting behaviors, report poorer health status, and are less likely to use preventive services (Parker, Ratzan, and Lurie, 2003). These data may suggest factors associated with health related disparities as many Hispanics may have yet to master the English language and literacy needed to navigate the health care system (Morrison, 2005). As Martinez and Carter-Pokras

(2006) report linguistic factors such as absence of personnel who speak Spanish, inability to speak English, and inability to fill out personal information forms, may serve as barriers to health care access.

There were only slight differences between males and females in the health access index, though not statistically significant. Among the total sample, respondents were more likely to report no health insurance coverage (66%) than those who reported some health insurance coverage, including managed care, Medicare and Medicaid (34%). Overall, about one fourth of males and one half of females reported no health insurance coverage. A higher percentage of men (89%) than women (60%) reported a delay in care during the past 12 months due to lack of health insurance and financial barriers. These findings are consistent with national data that show foreign-born adults are more likely to be uninsured than their native-born counterparts (26% compared with 11%). Among immigrants, Hispanic adults were the most likely to be without health insurance coverage (37%), followed by black (22%), Asian (15%), and white adults (13%). Almost three-fourths of U.S.-born adults had private health insurance coverage compared with over one-half of the immigrant population (Dey and Lucas, 2006).

The second research question of this study focused on three variables: are there major differences in reported number of chronic conditions, sources of health information and complementary/alternative medicine used by gender? Table 4.4 shows that the means were similar by gender on all the variables. The overall multivariate test was nonsignificant at Wilks' Lambda value= .947 and  $p = .079$  recalling that the test of significance is (Sig. <.05, using the .05 criteria).

**Table 4.4***Mean (SD) Reported Number for Numerical Values by Gender*

	<b>Gender</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
Reported # of Chronic Conditions	Male	0.43	0.67	40
	Female	0.90	1.12	87
	Total	0.75	1.02	127
Reported Sources of Health Information	Male	3.66	2.54	40
	Female	3.42	2.06	87
	Total	3.50	2.22	127
CAM Use	Male	2.11	1.32	40
	Female	2.35	1.24	87
	Total	2.27	1.27	127

**Table 4.5***Univariate Test for Numerical Variables by Gender*

<b>Source</b>	<b>DV</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Gender	# of Chronic Conditions	6.067	1	6.067	5.978	.016
	Reported Sources Health Information	1.542	1	1.542	.311	.578
	CAM Use	1.629	1	1.629	1.005	.318

The expectation that there would be overall differences on these variables is not supported by the data. The overall test was nonsignificant. The individual test for ‘reported number of chronic conditions’ was significant, although the significant univariate result could be a type 1 error since the overall multivariate test was nonsignificant.

First, caution should be taken in the interpretation of these results on chronic conditions since the reported numerical count comes from the item, “has a doctor ever ‘told’ you that you have (the specific chronic condition). Given the high percentage of no health insurance coverage in this sample (66%) undiagnosed health conditions may be present in this population.

Secondly, the data could indicate a relatively healthy immigrant population as mean age of the sample was 43.4 years and slightly more than half (65%) were high school graduates or higher. Lastly, data on reported number of chronic conditions

suggest that the women in the sample were more prone to health problems than the men. These data are consistent across the overall sample. Of those who had been told they had high blood pressure, 71% were women. Ninety percent of those who were told they had asthma were women and about 91% of those with arthritis were women. Limited information is available on antecedents of chronic conditions and consequences in terms of quality of life and self-perceived health status among Latinas with chronic health conditions, though it is known that Latinas are less likely to use health care services and to know when they have a chronic condition. Lastly, contributing factors to the onset of a chronic condition include genetic predisposition, attitudes towards life, one's living environment, the amount of time they have spend living in that environment and exercise and other healthy habits. These factors were not explored.

Sources of health information by gender were not significant. This study found the percentage of men and women who turn to radio, TV, newspaper, health fair, etc. for health information was fairly constant. Respondents were more likely to report health fairs (58%) and friends and family (56%) as sources of health information. Interestingly, only 37% of the total sample reported their health care provider or clinic as a source for health information. Consistent with these findings, Latinos who participated in focus groups generally *expected* to receive information during their visit with a doctor or other health care provider. One participant remarked, "I went to a dermatologist and he told me what I had but did not explain to me what it was. So I had to look for information about it" (Martinez and Carter-Pokras, 2006). Health interview survey results from DC, Baltimore and Virginia

confirmed the reach of television, radio, family and friends, and health centers/clinics. For example, 34.1% of Latino adults in DC reported obtaining health information from the radio, 76% from television, 26.1% from the newspaper, and 23.1% from family/friends (Council of Latino Agencies, 2005). Less educated persons and more recent immigrants were most likely to report inability to get health information.

Several socioeconomic characteristics that are often intertwined, including low levels of education and limited English proficiency, largely explain the gap in internet use between Hispanics and non-Hispanics (Pew Hispanic Center, 2006). The Commonwealth Fund Health Care Quality Survey (2001), found Hispanics and those of lower socioeconomic position have greater difficulty accessing health information. As the delivery of information grows more reliant on electronic dissemination (e.g., the “digital divide”), access to computers are of particular concern to populations with the greatest needs. Findings in this study showed Internet use to be very low. Women, (n=4) and men, (n=2) reported the Internet as a source of health information.

#### *Qualitative Analysis of Reported “Other Sources of Health Information”*

Socioeconomic position, education level, and primary language all affect whether Latinos will seek out health information, and how they will interpret that information (Nielsen-Bohlman, Panzer & Kindig, 2004). Participants who responded to “other sources of health information” reported internet use (n=6) outside of the previously sources, radio, TV, newspaper, magazine, health fair, friend or family, doctor, and health promoter.

Libraries, school and church were also reported as sources (n=4) and health information received from work (n=2) was also reported. Although, the Internet is seen as the number one medium of choice for researching health information by US Hispanics, Internet use priorities among immigrants may differ from those of native-born groups (Chaudhry, 2000) and access disparities by language and ethnicity persist (Martin, 2003).

Community-based organizations (CBO's) were also reported (n=3) as sources of health information. Specifically Casa de Maryland (CASA) was reported as a source. CASA's primary mission is to work with the community to improve the quality of life and fight for equal treatment and full access to resources and opportunities for low-income Latinos and their families. CASA also works with other low-income immigrant communities and organizations, makes its programs and activities available to them, and advocates for social, political, and economic justice for all low-income communities. Given the current climate of hostile responses and criticism to immigration, CBO's may prove to be safe havens of needed health information especially for immigrant Central and South American men and women.

Table 4.6 presents data on the 7 most frequently used CAM practices in ranked order by women as referent. Overall differences by gender were not supported by the data of use of Complementary/Alternative medicine. Limited data exists among Central and South Americans and their patterns of CAM use. The few studies conducted on Latino populations focus on Mexicans and Mexican Americans in the Border States. Studies show that most respondents use conventional sources of health care (e.g., primary care physicians) as primary sources of health care to a far greater



extent than traditional or folk sources. Most research confirms these study findings. (Hunt, Arar, & Akana, 2000; Skaer, Robison, Sclar, & Harding, 1996). Recent data from NHIS highlights that Hispanics having the highest provider non-disclosure rates (68.5%) of complementary and alternative medicines to their health care professionals followed by non-Hispanic blacks 65.1% and non-Hispanic whites (58.1%). Of particular interest in this study was the fact that Hispanics cited using CAM because conventional medical treatments were too expensive more frequently than non-Hispanic blacks or whites (Graham, et al., 2005).

**Table 4.6**

***Ranked Order Most Frequently Used Complementary/Alternative Medicine***

<b>CAM USE</b>	<b>Men (N) Percent</b>	<b>Women (N) Percent</b>
OTC Medicine from US	(24) 18.5%	(65) 50%
Vitamins from US	(23) 17.7%	(52) 40%
Prayer	(16) 12.3%	(46) 35.4%
Medicines from Home Country	(17) 13.1%	(34) 26.2%
Herbal Medicine	(12) 9.2%	(28) 21.5%
Chiropractic Therapy	(6) 4.6%	(14) 10.8%
Curandero	(1) .8%	(3) 2.3%

Table 4.6 show frequencies of most frequently reported CAM use with small gender differences. Zapata & Shippee-Rice (1999) found in their very small study of 6 Latinos that medications, including prescriptions, are shared within social networks. There are instances in which a sick person may simultaneously use prayer, folk and/or

herbal medicine, prescription medications obtained from a friend, and prescription medications prescribed by a nurse practitioner or physician. In a San Francisco–based study, CAM use was consistently high across four different ethnic groups, though the type of CAM used varied to some degree by ethnicity (Lee, et al., 2000). The authors found that African-American women used spiritual healing more frequently than other types of CAM (36%), Chinese women most often reported using herbal remedies (22%), and Latino women used dietary therapies (30%) and spiritual healing (26%). Lee et al., also reports significant predictors of CAM use for African-American, Chinese, Latino, and white women: higher income, engaging in exercise, and membership in community or support groups. In Cushman, et al., 1999 a qualitative study which used focus group data to compare CAM use between African-American and Hispanic women found higher CAM use among older women of both groups, with younger Hispanic women indicating the most distrust toward the effectiveness of CAM techniques. Complementary/Alternative Medicine use could have important implications with regard to self-perceived health status and health outcomes of a growing and under researched segment of the population.

In response to the well-known limited access and barriers to health care that Central and South American men and women face in Montgomery County, Maryland, and the persistent racial/ethnic disparities in underserved Latino communities, self-perceived health status as a health outcome measure captures the respondents subjective perception of their overall health. The total sample reported their health as “good” overall, (41.5%), with 9.2% and 32.3% of men and women respectively. Women were more likely to report their health as “fair or poor” (23.8%),

compared to men (16.5%). Overall, only (10.8%) of the total sample reported their health as “excellent.”

*Multivariate Results: Factors that Predict Self-Perceived Health Status*

Binary logistic regression was used to assess the impact of Health Access, English and Literacy Proficiency, Health Behaviors, Discrimination, Depression, Number of Chronic Conditions, Gender, and Education Level (the predictor variables) on Self-Perceived Health Status (the dependent variable).

The partial correlation was significant for Health Access, English and Literacy Proficiency, Number of Chronic Conditions, and Education Level. The model provided a good fit to the data since the chi-square statistic was significant at ( $X^2=24.846$ , degrees of freedom=8,  $p<.002$ ).

**Table 4.7**

*Test of Partial Correlation's for Predictors of Self-Perceived Health Status*

<b>Variables</b>	<b>Score</b>	<b>df</b>	<b>Sig.</b>
Health Access	6.310	1	.012
English & Literacy Proficiency	7.321	1	.007
Health Behaviors	.010	1	.920
Discrimination	1.758	1	.185
Depression	1.588	1	.208
# of Chronic Conditions	7.255	1	.007
Gender	.320	1	.572
Education Level	9.423	1	.002

Table 4.8 presents individual regression coefficients and related statistics from this analysis.

**Table 4.8**

***Regression Weights and (OR) when Predicting Self-Perceived Health Status***

Variables	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Odds Ratio</b>
Health Access	.430	.365	1.392	1	.238	1.538
English & Language Proficiency	.107	.099	1.182	1	.277	1.113
Health Behavior	-.309	.572	.293	1	.589	.734
Discrimination	-.301	.292	1.061	1	.303	.740
Depression	-.139	.131	1.116	1	.291	.871
Chronic Conditions	-.609	.238	6.532	1	.011	.544
Gender	-.052	.523	.010	1	.920	.949
Education Level	1.185	.571	4.311	1	.038	3.270

Two variables were significant predictors of self-perceived health status: education level and number of chronic conditions to the research question, “what factors are most likely to predict self-perceived health status?” The strongest predictor of self-perceived health status was higher education level. Education level contributed the largest increase in the odds of having good/very good/excellent self-perceived health status. Higher education and income levels have been linked to better health.

Browning et al., (2003) found that when education was included in the health status model self-perceived health status improved across time. Higher number of chronic conditions predicted fair/poor self-perceived health status. The results of this study substantiate previous research that show a strong association between higher levels of education and the greater likelihood of good to excellent perceived health

status. Interestingly the sample as a whole had higher levels of education than expected and this may account for these results. Those who were less healthy as measured by higher number of chronic conditions were more likely to report fair to poor/health. This confirms other studies. Thus, these data suggest that education level is highly associated with health literacy and English language proficiency.

*Qualitative Analysis of Complementary/ Alternative Medicine Use for Specific Conditions*

Three open-ended questions were asked regarding respondent's use of medications and remedies for specific acute health conditions, headache, fever and stomachache. The open-ended responses were collapsed into four broad categories: over-the counter medications (OTC), home remedies, seek health care, and other. The data for all three conditions (stomach ache, fever and headache) are presented in table 4.9 by most frequently mentioned.

**Table 4.9*****Most Frequently Mentioned Medications and Remedies used******For Specific Acute Health Conditions***

<b>Medications &amp; Remedies Used</b>	<b>Stomach ache N=126</b>	<b>Fever N=126</b>	<b>Headache N=120</b>
<b>OTC Medications</b>			
Pepto Bismol	20	--	--
None Used	20	21	11
Aspirin/Tylenol/ Advil/Aleve/	15	88	102
Alka Seltzer	11	1	2
Prevacid/Mylanta/ Beano/Maalox	10		
<b>Home Remedies</b>			
Herbal Teas	19	3	1
Food/Liquid Intake	14	2	--
Herbal Waters/ Water	8		
Cold Water Bath/ Cold Compress	--	8	--
<b>Seek Health Care</b>	4	2	2
<b>Other</b>	5	3	2

Consistent with data that show Latinos are more likely to use over the counter medications (77%) than Complementary/Alternative medicine, these data show similar use of OTC medication across the three acute health conditions. For example, aspirins /Advil /Motrin/ /Tylenol (n=102) is the most frequently mentioned medication use for headache. Interestingly, 15 respondents reported use of these medications for stomachache, which can have adverse effects if taken too frequently. These data may indicate that those respondents with low levels of health literacy lack a full understanding of their health problems and treatment. Low health literacy coupled with lower levels of education and limited English language proficiency can

contribute to the misuse of medicine. Additionally, since this study sample had a high percentage of no health care insurance coverage, use of OTC may indicate their lack of access to care and economic burden.

Teas comprised broad categories such as chamomile, tea with lemon, and honey and herbal teas. Respondents were more likely to report use of teas (n=19) for stomachache than headache or fever. These data are consistent with Burge and Albright's 2002 study that found the most popular remedy was tea, especially *Manzanilla* (chamomile). Outside the seven response categories of OTC medications from US, vitamins from US, prayer, medicines from home, herbal medicine, chiropractic therapy and curandero, participants were asked if they used "other methods?" A very small number (n=8) responded with prescription medicine (n=5) use, allergy pills (n=1), herbs (n=1), and acupuncture (n=1).

The limited numbers of studies that have focused on Latino populations have reported younger Latinos utilize lower CAM use. This study sample is relatively young with 60.6% reporting their age 18-44 years, which also may reflect younger Hispanic women indicating the most distrust toward the effectiveness of CAM techniques (Cushman, et al., 1999).

#### *Qualitative Analysis of reported "other health problems"*

In addition to the six reported chronic conditions, respondents were asked, "have you ever been told by a doctor that you have other health problems?" A small number of the study responded (n=26) to this open-ended research question. Allergies and vision problems were the most commonly cited.

**Table 4.10*****Most Frequently Mentioned “Other Health Problems”***

<b>Health Problems Reported</b>	<b>Frequency N=26</b>
Allergies	4
Problems with Vision	4
Urological Problems	3
Cardiovascular Disease	3
Depression/Stress	2
Osteoporosis	1
Ulcers	1
Prostate	1
Renal	1
Varicose Veins	1
Dental Problems	1
Back Pain	1
Various Health Problems	1

As previously reported, caution should be taken in the interpretation of these results on other health problems since the reported frequency of the item, “has a doctor ever ‘told’ you that you have (other health problem) had a small number of respondents. Of particular interest is the self-reported response of “stress” as a diagnosis that may relate to a lower self-perceived health status. In general, persons of lower socioeconomic position report fair or poorer health, in part, because they are exposed to more hardship and stress and have limited access to resources that can be used to prevent and cure disease (Phelan, Link, Diez-Roux, Kawachi, & Levin, 2004).

***Comparative Analysis by Latino Subgroup***

Comparative analyses of survey data (demographic, self-perceived health status, and health insurance) with national data was used to assess differences across Latino subgroups by gender (Table 4.11). Since national data are limited for study sample participants, Table 4.11 provides data on selected variables on



sociodemographic and health access indicators that have found to be associated with health disparities.

The comparison of this study with national data for Central and South Americans reveal that age distribution is similar but with more individuals over 65 (6.1%) than in the national sample (3.9%). National data show Latino women will make up 25 percent of the U.S. total population by the year 2050, they represent the youngest population of women in the United States; 40% are under the age of 21 years (Anderson, 2002). These data are consistent with the study sample that also show younger ages (55.6%) among women and (72.5%) for men.

Across income range, the study sample has significantly less income than the national sample although their education levels show similar patterns. Only 9.3% of the study sample reported incomes ranging from \$24,000-\$48,000 compared to total Latino (32.5%) and Mexican American (37.6%). Broken down by subgroup: total income for Central Americans was \$36,369 with Hondurans at \$31,526, Guatemalans at \$37,912 and Salvadorians at \$36,789 000 (US Census Bureau, 2004). National data show that Central and South Americans have higher incomes (36.4%) than all Latinos (32.5%) but slightly lower than the Mexican-American group.

The respondents in this sample had much higher education levels than other Latinos and Mexican Americans. Their occupational distribution in administrative support and professional positions was lower than for all Latinos but higher than Mexican Americans. Central and South American men and women in the study sample were more likely to be high school graduates (29.2%) than the national sample (26.9%) and are equally likely to have some college, college graduate and

advanced degree. According to Census 2000 data, 44.3% of Central American born age 25 and older has at least a high school diploma. Compared to the study sample (29.2%) this data shows that they are more likely to have a high school diploma. Eight percent of Central Americans have a bachelor's degree or higher (US Census Bureau, 2000) compared to the study sample (10%) and equally likely among the total Latino population (7.8%). Of the South American-born population age 25 and older, 74.3% reported having a high school degree.

Differentially, the data on occupation show that they are twice as likely to be laborers when compared to the national sample but slightly more likely to be in administrative or professional occupations in comparison with national sample.

According to national data, undocumented women are less likely to be in the labor force (62%) than undocumented men are or than women who are U.S. citizens. One reason is that proportionately more undocumented women are of childbearing age, and undocumented women are more likely than U.S. citizens to have children and remain in the home (Passel, 2005). Data from this sample showed that women were significantly more likely to be unemployed (19.9%) compared to men (0.8%), and less likely to be married than the other Latino groups. Self-perceived health status of fair/poor is almost three times the rate for the aggregate national percent of all Latinos and more than twice that of Mexican-Americans with Central and South American women study respondents having higher rates than male respondents. Slightly over 65% of study respondents report no health insurance coverage; female respondents were twice as likely as male respondents to report no health insurance coverage. This rate was twice as high as for all Latinos and Mexican Americans.

**Table 4.11**

**Comparative Analysis of Survey Data**

	Total	Study	Sample	National	Data		
<b>Variable</b>	Total	Male	Female	Total Latino <sup>1</sup>	NHW <sup>3</sup>	CSA <sup>4</sup>	Mexican American
<b>Age</b>							
18-44	60.6%	72.5%	55.6%	50.3% <sup>2</sup>	35.8%	56.7%	46.0%
45-64	33.3%	22.5%	37.8%	14.1%	27.3%	15.8%	13.4%
65>	6.1%	5%	6.7%	5.3%	14.5%	3.9%	4.1%
<b>Income</b>							
<\$4,800	11.6%	2.3%	9.3%	5.1%	2.1%	4.4%	5.1%
\$4,801-\$9,600	10.1%	2.3%	7.8%	8.7%	3.2%	5.3%	8.1%
\$9,601-\$14,400	17.1%	3.9%	13.2%	10.9%	5.1%	8.7%	11.6%
\$14,400-\$24,000	44.2%	17.8%	26.4%	20.1%	12.5%	19.0%	21.5%
\$24,001-\$48,000	9.3%	3.1%	6.2%	32.5%	30.4%	36.4%	37.6%
<b>Marital Status</b>							
Not Married	23.1%	6.9%	16.2%	42.6% <sup>6</sup>	37.8%	38.6%	35%
Married	54.6%	18.5%	36.1%	57.4%	62.2%	48.8%	52.7%
Separated	6.2%	0.00%	6.2%	2.3%	2.3%	4.7%	3.2%
Widowed	1.5%	0.00%	1.5%	6.4%	6.4%	2.2%	2.9%
Divorced	3.8%	.8%	3.1%	9.3%	9.3%	5.8%	6.2%
Living with Partner	10.0%	3.8%	6.2%				
<b>Education</b>							
<9 <sup>th</sup> Grade	18.5%	6.9%	11.5%	27.1% <sup>7</sup>	4.5%	23.5%	32.7%
9-12	16.2%	3.8%	12.3%	16.1%	11.4%	12.5%	17.6%
No Diploma							
High School	29.2%	6.9%	22.3%	26.9%	88.6%	25.5%	26.2%
Graduate							
Some College	20.0%	6.2%	13.8%	18.4%	25.7%	20.4%	16.4%
College	10.0%	3.1%	6.9%	7.8%	29.7%	12.9%	5.3%
Graduate							
4 years of advanced degree	6.1%	3.8%	2.3%	3.1%	9.1%	5.1%	1.8%

<sup>1</sup> Total US Latino Population

<sup>2</sup> Some percentages do not sum to 100.0 due to rounding and <18.

<sup>3</sup> Non-Hispanic White

<sup>4</sup> Central & South American

Sources for Data: May be found in Bibliography.

**Table 4.11 (continued)**

**Comparative Analysis of Survey Data**

<b>Variable</b>	<b>Total Total</b>	<b>Study Male</b>	<b>Sample Female</b>	<b>National Total Latino<sup>1</sup></b>	<b>Data NHW<sup>3</sup></b>	<b>CSA<sup>4</sup></b>	<b>Mexican American</b>
<b>Employment Status</b>							
Employed	74.6%	29.2%	45.3%	67.0%	67.1%	70.7%	68.1%
Un-Employed	20.7%	0.8%	19.9%	6.7%	3.6%	5.9%	8.6%
<b>Length of Time in United States</b>							
US less than 10 years	56.1%			20.5%	14.6%	26.3%	21.3%
US more than 10 years	43.9%			30.6%	3.1%		25.7%
<b>Self-Perceived Health Status</b>							
Excellent	10.8%	4.6%	6.2%	29.7% <sup>5</sup>	40%		28.0%
Very Good	13.8%	7.7%	6.2%	31.8%	29%		28%
Good	41.5%	9.2%	32.3%	27.6%	22%		32%
Fair or Poor	33.1%	16.5%	23.8%	10.9%	9%		15%
<b>Insurance Status</b>							
Coverage (yes)	34.6%	10.8%	23.8%	48.7%	78.3%		
Coverage (no)	65.4%	20.0%	45.4%	32% <sup>5</sup>	12.9%	38.6%	32.2%

<sup>1</sup> Total US Latino Population

<sup>2</sup> Some percentages do not sum to 100.0 due to rounding and <18.

<sup>3</sup> Non-Hispanic White

<sup>4</sup> Central & South American

Sources for Data: May be found in Bibliography.

These data suggest that improvement efforts that rely on population data for Hispanics as a single group could miss important opportunities for more targeted initiatives that met the needs of underserved and under researched Latino communities, such as Central and South American men and women. Recognizing these significant intra- and interpopulation differences also allows healthcare policymakers at the local level to more appropriately target services at Hispanic subgroups at greater risk of healthcare disparities (Weinick, et al., 2004; Levine & Briggs, 2006).

## **Chapter 5: Summary, Implications and Contributions**

The primary objective of this study was to examine selected health care factors that are associated with self-perceived health status among Central and South Americans in Montgomery County, Maryland by gender. The questions of the dissertation project emerge at a moment when growing racial/ethnic diversity and demographic changes, (especially the growing Latino immigrant population) that are occurring in the United States may have significant implications for health care services and health policy. This study's main contribution was to increase understanding of the selected health care factors that are associated with self-perceived health status by gender among this growing immigrant population.

Five research questions guided this study: (1) Are there differences by gender on health access, English language proficiency, literacy levels, health behaviors, perceived discrimination and depression? (2) Are there major differences in reported number of chronic conditions, sources of health information and complementary/alternative medicine used by gender? (3) What factors are most likely to predict self-perceived health status by gender? (4) What complementary and alternative medicines are Central and South Americans most likely to use by gender? And (5) What sociodemographic factors distinguish Central and South Americans from other Latinos subgroups?

The major findings of this study are that few gender differences on the major study variables of health access, English language proficiency, health literacy, perceived discrimination and health behaviors were found. However, there were trends that suggest that women are less likely to drink alcohol and smoke and seem to

have higher rates of depression. These data are consistent with national data and confirm existing findings on Latino women. Though not statistically significant, two findings unique to this study were gender differences on perceived discrimination and depression, two factors that have not been fully explored in the Central and South American immigrant community. Findings of this study also show low internet use, which may be directly related to low levels of education, income and limited English proficiency.

Given the current political climate in regards to immigration, women who were more likely to perceive unfair treatment based on their insurance status and the ability to speak English suggests an overall link to discriminatory practice in health care settings. As Villanueva (2002) contends; when particular groups of people are recruited to fill low-paying positions and where they may have fears of retribution, social, political, and economic relationships can create a commodity identity that devalues people, denies them access to socially valued resources, and reinforces a stigmatized status. Moreover, when a person lives and deals with dehumanizing behaviors, they have more negative mental and physical health outcomes (Clingerman, 2006; Finch, et al., 2001). These stigmatized statuses are complicated by racial and class locations. For Central and South Americans, differences by class, race, and indigenusness may increase their experiences of discriminatory practices and integration and upward mobility in United State society.

Most recently, the Pew Hispanic Center's 2006 survey, *The Immigration Debate* found among those Latinos polled, half reported experiencing discrimination, 12% said they have had more trouble or keeping a job; 15% said they have had

increased difficulty finding or keeping housing; 19% said they have been asked to produce documents to prove their immigration status more often than in the past; 22% said they are less likely to use government services; and 24% said they are less likely to travel abroad (Suro and Escobar, 2006).

These issues faced by the Latino community may have deleterious effects in physical, mental, and emotional health. Among health outcomes, perceived discrimination for women who rely on their health care providers to answer their questions during a consultation can have important effects on their adherence to treatment regimens and alleviate their apprehensions regarding emerging health conditions.

The three variables on reported number of chronic conditions, sources of health information, and complementary/alternative medicine showed no difference by gender. Several interpretations are plausible in light of these findings. The data could indicate a relatively healthy immigrant population which may be characterized by younger age (mean age of the sample was 43.4 years) and higher levels of education with slightly more than half (65%) high school graduates or higher. Overall, this Central and South American population was less likely to use Complementary and Alternative medicines. The research literature has shown that Latinos are more likely to use over the counter medications (77%) than Complementary/Alternative medicine, and Hispanics and African Americans used CAM *less* frequently (27% and 26% respectively) than non-Hispanic whites (36%) (Graham et al., 2005).

The strongest predictor of self-perceived health status was higher education levels. Education level contributed the largest increase in the odds of having



good/very good/excellent self-perceived health status. These findings confirm prior results that found the strongest predictors of health care use for Latino immigrants are economic status and health insurance coverage (AHRQ, 2005; DeNavas-Walt, Proctor, & Mills, 2003). Having less than a high school education is highly associated with employment that does not provide health benefits, and lack of insurance is one of the most critical issues facing Latino immigrants (Carrillo, Treviño, Betancourt, & Coustasse 2001). However, although over two-thirds of the respondents reported no health insurance coverage, education level remained a major predictor. This may suggest that those with higher education have been able to maintain the healthy immigrant effect and have access to unmeasured resources. In contrast, for individuals with less education who report poor or fair health status, racialization (a factor not measured in this study) may have also been a major predictor.

Lastly, sociodemographic factors distinguish Central and South Americans from other Latinos subgroups across some selected categories. In comparison to other Latinos, the study sample has significantly less income than the national sample although their education levels show similar patterns. Self-perceived health status of fair/poor is almost three times the rate of all Latinos. Central and South American women respondents showed higher rates of fair/poor health status than male respondents did. Higher number of chronic conditions also predicted fair/poor self-perceived health status. For women, the onset of chronic conditions disrupts all her major roles. Limited work has been conducted on the relationship between chronic conditions and gender roles among Latino women (Zambrana and Dill, 2006). Scholars have noted the gender effects of the onset of disease. When a woman is

diagnosed with a chronic illness, “convictions regarding one’s own identity become shaken, frequently altering both self perceptions and self-concept” (Gordon, Feldman & Crose, 1998). Women might adapt to the illness experience “within a social climate that is frequently far from supportive” (Gordon, Feldman & Crose, 1998). These feelings of control over an illness and an illness have control over one’s life resurface in other studies that examine the effects of a chronic illness on quality of life (QOL) (Burckhardt, 1985; Jordan et al, 1998). Burckhardt (1985) found that quality of life (QOL) is affected by factors such as internal control over one’s health (20%), negative attitude (15%), perceived support (10%) and the severity of impairment (25%). For women who have been diagnosed in this “social climate” that is far from supportive is an important area of research because the social context is an integral part of any illness. Women with chronic conditions experience the material limits of their bodies, not as solid boundaries, but as fluid, permeable borders that occupy a specific space. Gloria Anzaldua calls such a space *la frontera*/the borderlands, a “place of contradictions,” a “landscape of shifting and multiple identity and integrity” (1999: Pg. 19). She recognizes that to dwell within the borderlands “is like trying to swim in a new element, an alien element insofar as it requires that we refuse both to abandon history and to embrace uncritically the future (Cohen & Weiss, 2003). This area requires additional inquiry.

The findings reported here contribute to the sparse literature available for the selected health care factors that are associated with self-perceived health status among Central and South American immigrant population. The results may not be representative of the total Central and South American population or those in other

geographic locations. Thus, these data cannot be generalized to other Latino immigrant groups in the United States. However, as shown, most of the findings are consistent with other studies of Latinos in the United States. Similar findings have been reported with the small number of Mexican women immigrants (Berk et al., 2000; Villarejo, 2003), however, little is known about this population of Central and South American women. The findings of this study contribute to a better understanding of the specific health related factors and suggest that improvement efforts that rely on population data for Hispanics as a single group could miss important opportunities for more targeted initiatives. As has been observed by scholars differences exist among Latina/o subgroups by gender, nation, race, ethnicity and SEP and future research is required to examine differential factors that intersect with Latinidad to determine best practice approaches.

#### *Research and Practice Implications*

Very few studies focus on self-perceived health status and health outcomes among Central and South American men and women. Studies that focus on women alone are almost nonexistent. Yet their growth and presence in the United States require the attention of health care researchers, policy makers and community-based health workers. These research findings, beyond assuring adequate survey and epidemiological data on specific Latino subgroups, are an important first step in moving the field of racial/ethnic disparity research forward.

These data demonstrate the importance of self-perceived health status as a valid measure of health status in cross-sectional studies. Understanding its correlates may help health care providers and policy makers prioritize culturally sensitive health

promotion and prevention interventions. The results which indicated that the overall variables of health access, English and literacy proficiency, health behaviors, discrimination, depression and gender are important variables that must be examined simultaneously. Future research is needed to highlight health disparities as the product of a multitude of factors, among them: psychosocial, nation, socioeconomic, quality of care factors and domestic policy factors.

This formative research also fosters dialogue among the recent immigration debates, economic and political realities, and discriminatory practices. Immigration populations do not share identical experiences. There is a great deal of variance across immigrant populations regarding their political, social, and socioeconomic position both before and after immigration.

For Central and South Americans there are within group differences by race, SEP, and gender. Demographic data suggest that DC's Latino population is very diverse as it was formed through a pattern of migration and settlement that is unique to the metropolitan area. Unlike the Mexican majority Latino population, the 68% of DC Latinos who are Salvadoran and Guatemalan faced a particular set of legal challenges, which have implications for health care needs and self-perceived health status, especially for women. Gender differences, like the racial, ethnic, and class differences that cross-cut them are the result of social factors. In analyzing gender disparities and gender roles for Central and South American women, the major theoretical assumption is that these social factors are embedded in systems of roles and practices legitimated by norms and values—that is our institutions—the economy, the family, the medical system, and the gender order (Lorber, 2000). In

order to understand how Central and South American immigrant women with poor or fair self-perceived health status experience their health is to understand that this experience takes place within a web of interaction. This web ties together the woman concerned, family, friends, coworkers, health care professionals, medical bureaucracies, the physical setting, technology, government policies and politics, economics, values, knowledge, and beliefs.

These differences require attention and future analysis. Immigration history, voluntary or involuntary immigration, violence, post-traumatic stress disorders are all issues of future inquiry. In order to reach the goal “to eliminate disparities by the year 2010” set out by the US Department of Health and Human Services, *Healthy People 2010*, research must focus on the historical underrepresentation and economic subordination in US society by Latino immigrant subgroup. Due to the lack of economic, community, and political resources, and the growing backlash between documented and undocumented Latinos, the likelihood of reaching *Healthy People 2010* goals for Latino immigrants seems very difficult to achieve.

The consequences of not reaching these goals, regardless of socioeconomic position, gender, and nation, can be detrimental to the economic and social well-being of the U.S. as a whole. As reported by the International Organization for Migration, (2005), it is also essential to improve immigrants’ access to, and utilization of health and social services. The documented need for health services and the importance of a healthy working population, together with the recognition that Latino immigrants in the United States make a unique contribution to the economic, social and cultural

survival of this country requires research to develop interventions that can benefit the country and its communities.

The findings of this study also demonstrate the positive implications of community-based participatory research (CBPR) methodology as an alternative to traditional population-based biomedical research practices. Community-based participatory research (CBPR) encourages active and equal partnerships between community members and academic investigators. CBPR is an applied approach that enables community residents to more actively participate in the full spectrum of research with a goal of influencing change in community health, systems, programs or policies. Researchers collaborate with the community to develop models and approaches to building communication, trust and capacity, with the final goal of increasing community participation in the research process. This collaborative approach to research equitably involves all partners in the research process and recognizes the unique strengths that each brings. Its value is in achieving a greater understanding of the socio-economic, political, and cultural factors influencing health outside a biomedical framework (Martinez & Carter-Pokras, 2006). This study demonstrates that community-based participatory research can be an effective tool to enhance our knowledge of health status and outcomes through innovative intervention strategies and policy change, and addresses the health concerns of community residents. If we hope to make any serious progress to decrease persistent health disparities, a more intersectional approach allows us to engage the difficult questions and concerns about Central and South American women and the connections between

the health behaviors, access indicators, health information and availability of health and mental health services.

Additional work and research is needed to examine the linkages between discrimination and depression among Central and South American women. The findings from this study will be useful to policymakers, health care researchers, and community-based health care practitioners, who provide health care and other health-related services to Central and South American men and women. They may be particularly relevant in areas like the Washington DC metropolitan area that have experienced a rapid influx of immigrants in a short period of time. As the Latino immigrant population continues to grow, the need for accessible and affordable health care services will become increasingly apparent.

#### *Theoretical Contributions*

Inequity is a product of the ways in which race/ethnicity, class, and gender are embedded within particular social contexts as a result of institutional arrangements that produce and reproduce health inequalities, especially among immigrant groups such as Central and South Americans. The major theoretical argument and the implications of the findings are that the elimination of inequities in health status outcomes will require changes not only in psychosocial burdens and access to health care delivery systems, but also in the distribution of health care resources. The lack of research and misconceptions of Latinos as a homogeneous population lacking within-group diversity could function as a barrier to efforts aimed at providing appropriate care and result in the continued health disparities and inequalities the Latino community faces. The theoretical contribution is applying an intersectional analysis

that begins with the experiences of groups that occupy multiple social locations and finds approaches and ideas that focus on the complexity rather than the singularity of human experience. This dissertation study utilized intersectional analysis and integrated multiple interdisciplinary sources to examine the simultaneity of identities (gender, nation, immigration status and SEP) among Central and South American men and women. The importance of moving beyond individual categories of identity and including social context expands the models for understanding disparity. Thus, how the mutually constituted dimensions of identity (intersection of race/ethnicity, class, national origin and gender) are linked to institutional health care resources and policy preferences (such as immigration policy) help to better explain the factors associated with the material consequences (health status) for Central/South American women.

This study provides an opportunity to foster a critical dialogue in feminist scholarship that informs social science theorizing and empirical research, bridges gaps between theory and practice, and informs and enhances continued efforts to eliminate the social inequalities that drive persistent disparities in health by gender, race, ethnicity, immigration status and socioeconomic position.

Secondly, this study contributes in expanding the women's health agenda by inserting in the dialogue the importance of the intersection of race/ethnicity and class as experienced by Latinas. Critical public health issues facing Latinas must be informed by community-based data to better develop effective interventions to eliminate racial/ethnic disparities. This study contributes to expanding existing frameworks on women's health with an intersectional gaze. Research on the health of



Latinas presents unique opportunities to advance scientific understandings of underlying processes relevant to the health of other women and populations (Amaro & de la Torre, 2006). Thus, this study will contribute to multiple fields including public health and Latino Studies. A final implication is that the nature of this work can open up the landscape of health disparity research for fruitful dialogue and collaborations to take place as an intersectional, intellectual endeavor in the social and medical sciences. A critical contribution of this study is to foreground health disparities as the product of a multitude of factors, among them: psychosocial, cultural, socioeconomic, quality of care factors and policy factors (Atrash & Hunter, 2006). Many of these factors fall outside the influence of the health care system but constitute an integral part of theorizing Hispanic healthcare disparities.

*Contribution to Women's Health and Women's Studies*

The last three decades have witnessed increasing attention to women's health research. The benchmark for the inclusion of gender in health studies was marked by the establishment of the NIH Office for Research on Women's Health in 1991. Yet the discipline of Women's Studies has few scholars engaged in research in the field of women's health with few exceptions. Significant efforts in feminist research have been focused on challenging positivist empiricism particularly the role of objectivity in science (Biber-Heese, 2007). While feminist social science scholars have focused their efforts on contesting the biomedical models, the interrelationship between gender, health, the institutional power in health care systems and the impact on women with multiple identity markers (the intersection of race, class, and ethnicity) have been overlooked.

At its forefront Women's Studies draws from multiple sources of knowledge, has multiple starting points for analyses, and also redefines the parameters of knowledge and its foundations. The field of Women's studies through its intersectional perspective inserts categories of gender, race, ethnicity, class and other critical dimensions of difference to understand the raced and classed lived experiences of women in different social locations, to learn both what factors account—and how they account—for women's difference. Thus, the theoretical contribution of this study to the field of Women's Studies is to integrate multiple interdisciplinary sources to examine the simultaneity of identities (gender, nation, immigration status and SES) among Central and South American women and how these social categories interact with institutional health care hierarchies and the effect on their bodies as evidenced by self-reported perceived health status.

The contributions of feminist have been formidable in the field of body, sexuality and caretaking roles. For example, scholars have begun to identify the meaning of ill health for women and the need to begin by identifying the major areas of activity that constitutes women's lives (Doyal, 1995). This becomes important since we usually consider physical health as a state in which people can do what they have to do or want to do. When a woman is diagnosed, the illness will affect the physiological state of the body, but in essence, little is known about illness as a disturbance of a woman's social lives. As Lorber (2000) contends, "the perception that something is wrong and the guesses as to the cause are always experienced in a social context." These important observations by feminist scholars can serve as

critical standpoints for future research by women studies scholars to explore the lives of Central and South American women in the United States context.

This study also brings attention to the strong gap that exists in the field of Women's Studies in studies of Latino women. This significant omission from the discipline of Women's Studies can be attributed to several factors: lack of women of color especially Latino women in departments of Women's Studies; limited number of women in the social and public health sciences in Women's Studies; and the limited funding resources available to engage in more descriptive and exploratory research studies on emerging populations. A newly funded NHLBI study on Hispanic populations is expected to collect data over the next six years on 16,000 Latinos nationwide including Central and South Americans.

The discipline of Women's Studies has an important role in engaging in research in Latino women. Collaborative, interdisciplinary research as a hallmark of the discipline and their knowledge base on the multiple roles of women and their social location in United State society and its impact on their identity provides an unprecedented opportunity to develop this emerging field of knowledge.

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